ALCON
ELECTRONICS
PRIVATE LIMITED
An Exxelia Company

DC-LINK FILM CAPACITORS

▪ 400 VDC to 3000 VDC ▪ High Ripple ▪ Low Inductance

EXXELIA

CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited
certifies that

Alcon Electronics Pvt. Ltd.
34-B, MIDC Industrial Estate, Satpur
Nashik - 422 007, Maharashtra, INDIA

including the sites and scope of application see enclosure

has implemented Quality Management System
in accordance with ISO 9001:2015
for the scope of

DESIGN, DEVELOPMENT, MANUFACTURE AND SUPPLY OF
ALUMINIUM ELECTROLYTIC CAPACITORS & FILM CAPACITORS

The certificate is valid from 2021-08-02 until 2024-08-01
Subject to successful completion of annual periodic audits.
The present status of this Certificate can be obtained on www.tuvsud.com/ps
Further clarifications regarding the scope of this certificate may be obtained by consulting the certification body

Certificate Registration No. 99 100 16077
Date of Initial certification: 2018-05-24
Issue Date: 2021-08-16 Rev. 00

Rahul Kale
Head of Certification Body
of TÜV SÜD South Asia Private Limited, Mumbai
Member of TÜV SÜD Group

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TÜV SÜD South Asia Pvt. Ltd. ■ TÜV SÜD House ■ Gat. No.64 ■ Kothari (East) ■ Mumbai ■ 400072 ■ Maharashtra ■ INDIA

ISO 9001-2015
Quality Standard

CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited
certifies that

Alcon Electronics Pvt. Ltd.
34-B, MIDC Industrial Estate, Satpur
Nashik - 422 007, Maharashtra, INDIA

including the sites and scope of application see enclosure

has implemented Environmental Management System
in accordance with ISO 14001:2015
for the scope of

DESIGN, DEVELOPMENT, MANUFACTURE AND SUPPLY OF
ALUMINIUM ELECTROLYTIC CAPACITORS & FILM CAPACITORS

The certificate is valid from 2021-08-02 until 2024-08-01
Subject to successful completion of annual periodic audits.
The present status of this Certificate can be obtained on www.tuvsud.com/ps
Further clarifications regarding the scope of this certificate may be obtained by consulting the certification body

Certificate Registration No. 99 104 00331
Date of Initial certification : 2015-11-25
Issue Date: 2021-08-16 Rev. 00

Rahul Kale
Head of Certification Body
of TÜV SÜD South Asia Private Limited, Mumbai
Member of TÜV SÜD Group

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TÜV SÜD South Asia Pvt. Ltd. ■ TÜV SÜD House ■ Gat. No.64 ■ Kothari (East) ■ Mumbai ■ 400072 ■ Maharashtra ■ INDIA

ISO 14001-2015
Environmental Standard

CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited
certifies that

Alcon Electronics Pvt. Ltd.
34-B, MIDC Industrial Estate, Satpur
Nashik - 422 007, Maharashtra, INDIA

including the sites and scope of application see enclosure

has implemented Occupational Health and Safety Management System
in accordance with ISO 45001:2018
for the scope of

DESIGN, DEVELOPMENT, MANUFACTURE AND SUPPLY OF
ALUMINIUM ELECTROLYTIC CAPACITORS & FILM CAPACITORS

The certificate is valid from 2021-08-02 until 2024-08-01
Subject to successful completion of annual periodic audits.
The present status of this Certificate can be obtained on www.tuvsud.com/ps
Further clarifications regarding the scope of this certificate may be obtained by consulting the certification body

Certificate Registration No. 99 117 00408
Date of Initial certification : 2018-05-24
Issue Date: 2021-08-16 Rev. 00

Rahul Kale
Head of Certification Body
of TÜV SÜD South Asia Private Limited, Mumbai
Member of TÜV SÜD Group

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TÜV SÜD South Asia Pvt. Ltd. ■ TÜV SÜD House ■ Gat. No.64 ■ Kothari (East) ■ Mumbai ■ 400072 ■ Maharashtra ■ INDIA

ISO 45001-2018
Occupational Health and Safety
Standard

Alcon started manufacturing aluminium electrolytic capacitors for the Indian entertainment electronics industry in 1977. Over the years the focus has shifted and Alcon now manufactures a large range of high CV screw terminal type aluminium electrolytic capacitors and a large variety of film capacitors for power electronic applications. The range of film capacitors now includes 3 types namely, IGBT snubber capacitors (direct mounting with - different terminals styles to suit all types of power IGBT modules), DC Link capacitors for high frequency application in power electronic and Power film capacitors which are designed for application involving wide operating frequency range of 5 kHz to 1 MHz, high current ratings of 200 to 1250 Arms and voltage ratings of 400 to 1200 Vrms.

With this enlarged range of capacitors, Alcon caters to the increasing needs of the power electronics sector. To improve market share in India and abroad Alcon has now completed the expansion which has enabled it to create additional manufacturing capacity for all capacitor types mentioned above. With this expansion a new more modern, well equipped R & D Laboratory has been established. This will facilitate further product development at Alcon. This laboratory is equipped to collect application data related to all types of capacitors that will be manufactured. Alcon is now fully equipped to cater to the increasing requirements of the target industries and will therefore fall in line with the Governments plans of " Make in India ". Alcon will not only cater to the needs of the AC drives, UPS systems and the Inverter markets but will also cater to requirements of the industries involved in the manufacture of Wireless Electric Vehicle charging, High Frequency Induction Heating Equipment, Windmill and Solar Inverters, Telecom Equipment, besides a host of many special purpose industrial electronic equipment like Health Care (MRI, CT scan and X-ray) Equipment, Welding and Pulse Magnetizing Equipment, to name only a few.

Alcon has been able to meet the exacting quality criteria and standards of Indian as well discerning customers in USA, Germany, Italy, UK, Japan, Norway, Sweden, Denmark, South Korea, Turkey and even the very price conscious customers in China. Alcon believes that quality has to be built into the entire manufacturing process. The finest end products are assured by using the finest inputs, proven technology, modern production processes and equipment's and stringent quality control. Alcon is registered to ISO 9001, ISO 14001 and ISO 45001 signifying Alcon's commitment to quality, reliability and environment protection on the one hand and to safety as per international standards, on the other.

Designing capacitors for special applications requires an in-depth understanding of the application, knowledge of changing technologies, the ability to develop innovative technology concepts and finally, incorporate these concepts into the capacitors design & manufacturing processes. This would give the users high reliability and high performance products. Alcon's capability to make custom designed capacitors is well known. One of Alcon's significant advantage is that every stage of product development and innovation is evaluated in terms of changing technologies and user needs. Custom designed capacitors allow the users to select the right capacitor at the most viable price. Custom-designed capacitors account for almost 50% of Alcon's sales. It is also for this reason that Alcon today exports about 30% of its production and after the current planned expansion the company's target is to export 50% of its annual production. To enable the company to work effectively towards this objective Alcon's range of aluminium electrolytic capacitors now have CE marking and its range of DCL - 41 DC-Link Capacitors are UL approved.

At Alcon, responsiveness to customers needs is an integral part of our marketing strategy. We work with customers, to understand their production operations and application needs, analyse problems and offer optimum and cost effective solutions. We do what it takes to satisfy customer requirements. Alcon has a marketing team with component specific knowledge and experience. Our distributors who are located in all important cities in India and in many cities internationally, function as marketing nerve centres and provide timely deliveries to consumers in their region. Alcon has 23 distributors in India and 18 across the Globe. Alcon has received several awards as a recognition of the company's product quality, service, timely delivery and technology. Last fiscal the company received an award from Emerson Network Power India Pvt. Ltd., which was titled "Emerson Vendor appreciation Award." This year we have received an award titled "Supplier Technology Award" from GE Healthcare. This award is for innovative product designs and development of several new products for GE in India. "GE believes that this is the kind of partnership they look forward to in today's uncertain world."

Late 2021, Alcon joined forces with Exxelia, a Paris, France-headquartered global leader in the design, manufacture and sale of high-reliability complex, passive electronic components and rotary joint assemblies for aerospace, defense, medical, rail, energy and telecommunications applications. Among Exxelia's products are resistors, inductors, complex slip rings and high-end capacitors that Alcon's product offering complemented and strengthened.

Alcon and Exxelia's Customers are located in India and in many countries worldwide.

India : New Delhi, Jaipur, Ahmedabad, Baroda, Bhopal, Mumbai, Pune, **Nashik**, Hyderabad, Bangalore, Chennai, Cochin, Coimbatore, Trivandram & Kolkata

International : Australia, China, Czech Republic, Denmark, Estonia, Finland, **France**, Germany, Italy, Ukraine, Japan, Latvia, Lithuania, Netherlands, Poland, Romania, Slovakia, U.K, USA, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Turkey, Dubai, Singapore, Norway, Indonesia, Hongkong

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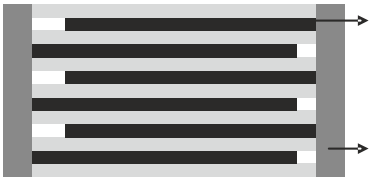
DCL-6

Highlights

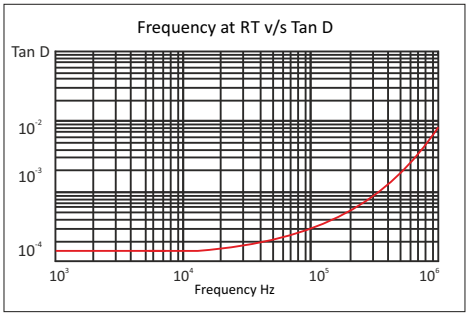
- Special metallized polypropylene film
- Low ESR
- High ripple
- High reliability
- Flame retardancy - UL94-V0

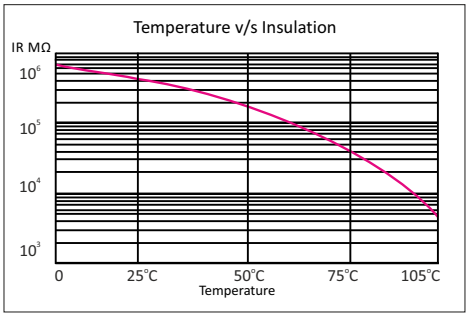
Construction

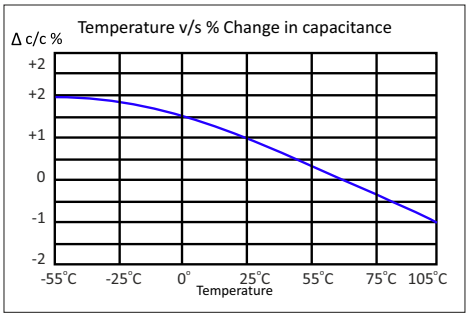


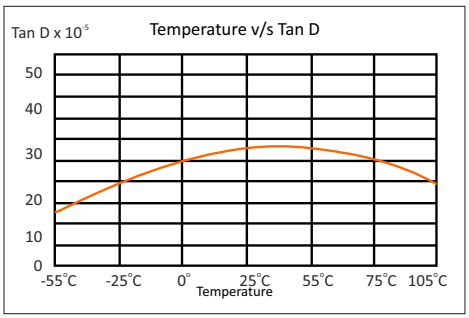
Applications

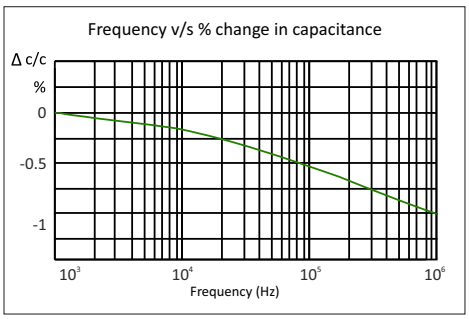
- DC filtering
- Wind power inverters
- Solar power inverters
- Induction heaters
- Electric vehicle inverters
- Motor drives











DCL-6

Technical Specifications

Physical Characteristics

▪ Dielectric material	Polypropylene film
▪ Electrode material	Metallized polypropylene film
▪ Winding construction	Polypropylene film, metallized polypropylene film
▪ Enclosure	Preformed UL 94-V0 plastic case with thermosetting resin-fill
▪ Terminals	Tinned Copper

Electrical Characteristics

▪ Capacitance range	4.7µF to 120µF
▪ Capacity tolerance	±10%(K)
▪ Rated voltage VDC	400, 500, 600, 750, 800, 900, 1000, 1200, 1500
▪ Test voltage between terminals	1.25 x rated voltage VDC for 60 seconds
▪ Test voltage terminal to case	3KVAC at 50Hz for 60 seconds
▪ Dissipation factor (Tan d)	$\leq$0.002 at 1 KHz and 25°C
▪ Temperature range	-40°C to +85°C
▪ Insulation resistance MΩ x µF	$\geq$10,000 s at 25°C (s = MΩ x µF)
▪ Reference Standard	IEC 61071 and IEC 60068

Marking on Capacitors

Each capacitor will have the following information printed on it, sequentially:

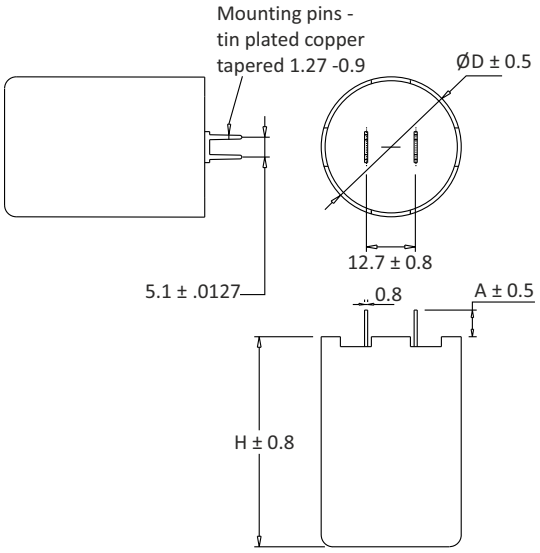
- The Company name in words ALCON
- The capacitor grade viz DCL-6
- The capacitance value MFD
- The rated voltage VDC
- Capacity tolerance and manufacturing code
- Part number on non-standard capacitors

DCL-6

Standard Capacitor Values

Rated voltage VDC	Nominal Capacitance MFD at 1 KHz	Ripple current rating Irms at 10KHz to 100KHz			Typical ESR at 10~100KHz mΩ	DV/DT	Dimensions mm		Terminal Style	Ordering Code
		25°C	50°C	75°C			ØD	H		
400	35.0	24.0	19.0	14.5	6.0	30	36.0	54.0	L2P	SD000350400AO0J70L2PK01
	80.0	35.0	28.0	14.5	5.0	20	50.8	50.8	L3P	SD000800400AO0J60L3PK01
	120.0	38.0	31.0	20.0	4.0	15	63.5	51.4	L3P	SD001200400AO0J80L3PK01
500	35.0	22.0	18.0	13.0	8.0	26	36.0	54.0	L2P	SD000350500AO0J70L2PK01
	75.0	34.0	27.0	14.0	5.1	16	50.8	50.8	L3P	SD000750500AO0J60L3PK01
	110.0	37.0	30.0	19.0	4.2	11	63.5	51.4	L3P	SD001100500AO0J80L3PK01
600	30.0	20.0	17.0	12.0	9.0	30	36.0	54.0	L2P	SD000300600AO0J70L2PK01
	70.0	33.0	26.0	13.0	6.5	22	50.8	50.8	L3P	SD000700600AO0J60L3PK01
	100.0	36.0	29.0	18.5	4.1	17	63.5	51.4	L3P	SD001000600AO0J80L3PK01
750	20.0	19.0	16.0	10.0	10.0	38	36.0	54.0	L2P	SD000200750AO0J70L2PK01
	60.0	30.0	26.0	15.0	4.0	26	50.8	50.8	L3P	SD000600750AO0J60L3PK01
	90.0	35.0	28.0	20.0	3.0	23	63.5	51.4	L3P	SD000900750AO0J80L3PK01
800	15.0	18.5	15.0	9.8	10.0	42	36.0	54.0	L2P	SD000150800AO0J70L2PK01
	60.0	35.0	26.0	15.0	4.0	30	50.8	50.8	L3P	SD000600800AO0J60L3PK01
	90.0	45.0	28.0	20.0	3.0	27	63.5	51.4	L3P	SD000900800AO0J80L3PK01
900	13.50	18.0	14.5	9.6	10.5	43	36.0	54.0	L2P	SD013U50900AO0J70L2PK01
	40.0	34.0	25.0	15.0	4.5	33	50.8	50.8	L3P	SD000400900AO0J60L3PK01
	65.0	43.0	27.0	20.0	4.0	30	63.5	51.4	L3P	SD000650900AO0J80L3PK01
1000	10.0	17.5	13.5	9.0	12.0	50	36.0	54.0	L2P	SD000101000AO0J70L2PK01
	25.0	33.0	24.0	11.0	8.5	40	50.8	50.8	L3P	SD000251000AO0J60L3PK01
	35.0	42.0	26.0	13.0	6.7	37	63.5	51.4	L3P	SD000351000AO0J80L3PK01
1200	7.50	16.0	12.0	8.4	13.5	60	36.0	54.0	L2P	SD07U501200AO0J70L2PK01
	18.0	26.0	20.0	10.0	9.0	50	50.8	50.8	L3P	SD000181200AO0J60L3PK01
	27.0	30.0	25.0	18.0	7.8	47	63.5	51.4	L3P	SD000271200AO0J80L3PK01
1500	4.70	15.0	11.5	7.8	15.0	72	36.0	54.0	L2P	SD04U701500AO0J70L2PK01
	12.0	24.0	19.0	10.0	10.0	62	50.8	50.8	L3P	SD000121500AO0J60L3PK01
	18.0	29.0	22.0	12.0	9.0	59	63.5	51.4	L3P	SD000181500AO0J80L3PK01

Capacitor Drawing and Terminal Style



	L2P	L3P
A	7.0	7.6

Terminal style : L2P/L3P

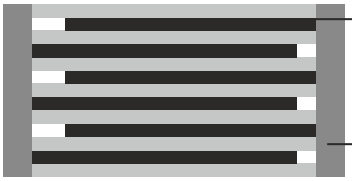
Dimensions in mm

DCL- 14

Highlights

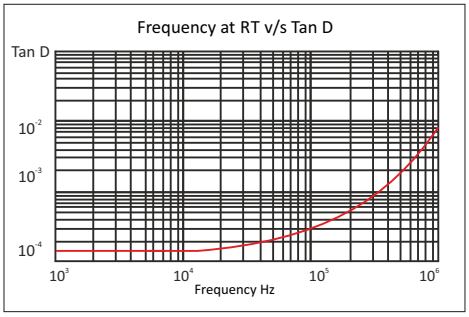
- Self-Inductance is low
- Low ESR
- High thermal conductivity
- Life expectancy as high as 100 Khrs
- Radial terminals
- Flame retardant UL94- V0, ROHS compliant

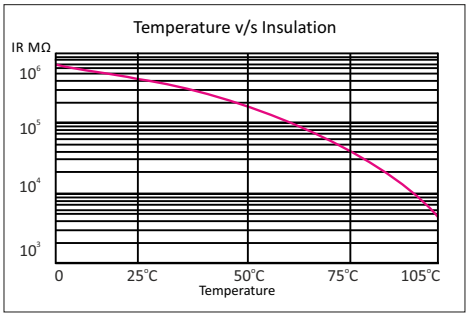
Construction

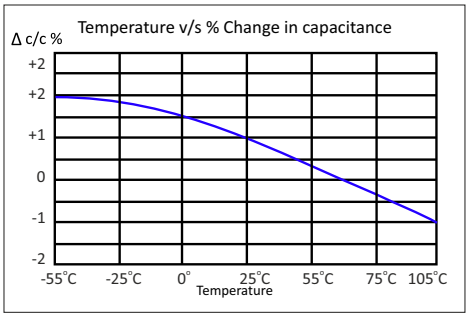


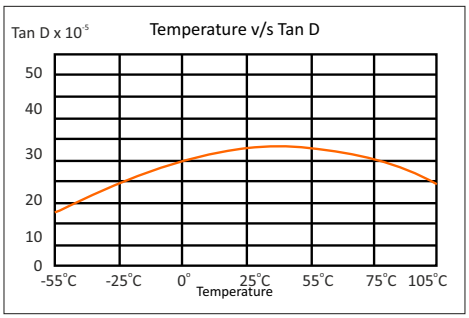
Applications

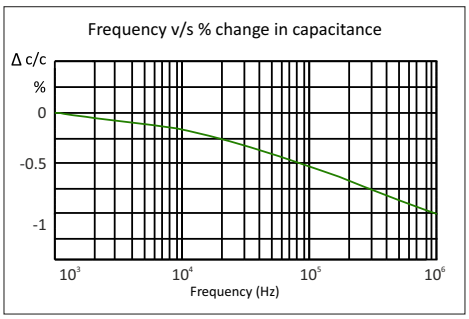
- Renewable energy inverters
- UPS
- Battery chargers
- Motor drives











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Technical Specifications

Physical Characteristics

▪ Electrode material	Metallized polypropylene film
▪ Winding construction	Polypropylene film, metallized polypropylene film
▪ Enclosure	Performed UL 94V-0 plastic case with thermosetting resin fill
▪ Terminals	Tinned copper wire
▪ Encapsulation	UL 94-V0 plastic case with UL 94-V0 resign sealing

Electrical Characteristics

▪ Capacitance range	1µF to 500µF
▪ Capacity tolerance	± 5% (J), ± 10% (K)
▪ Rated voltage (at 85°C)	500, 600, 800, 900, 1000, 1200
▪ Test voltage between terminals	1.5 x rated voltage VDC for 10 seconds
▪ Test voltage terminal to case	3KVAC at 50Hz for 60 seconds
▪ Dissipation factor (Tan d)	≤0.05 at 10KHz and 25°C
▪ Temperature range	-55°C to +85°C, 105°C (with derating)
▪ Insulation resistance MΩ x µF	≥10,000 S at 25°C (S= MΩ x µF), after 1 min of application of 500 Vdc between terminals for V_{NDC} > 500 Vdc; 100 Vdc for V_{NDC} = 500 Vdc.
▪ Reference Standard	IEC 61071 and IEC 60068
▪ Peak to peak ripple voltage	0.2 x V_{NDC}
▪ Climatic testing class	55/105/56
▪ Life expectancy	> 100, 000 hours at V_{NDC} and 70°C
▪ FIT	100 at 0.5 x V_{NDC} and +40°C

Marking on Capacitors

Each capacitor will have the following information laser printed on it, sequentially:

- The Company's symbol followed by the words ALCON
- The capacitor grade viz DCL-14
- The capacitance value MFD
- The rated voltage VDC
- Capacity tolerance and manufacturing code
- Design reference number on non-standard capacitors

DCL- 14

Standard Capacitor Values

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 100 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
V_{OPDC} AT 70 °C = 600 V, V_{OPDC} AT 105 °C = 350 V																		
500	1	9.0	19.0	32.0	0.8	ZC1	27.5	-	90.0	-	40.0	40	0.041	1.5	-	0.011	-	SD000010500ANZC1____K01
	2	9.0	19.0	32.0	0.8	ZC1	27.5	-	45.0	-	40.0	80	0.041	2.0	-	0.011	-	SD000020500ANZC1____K01
	3	9.0	19.0	32.0	0.8	ZC1	27.5	-	30.0	-	40.0	120	0.041	2.5	-	0.011	-	SD000030500ANZC1____K01
	4	11.0	21.0	32.0	0.8	ZC2	27.5	-	23.0	-	40.0	160	0.035	3.5	-	0.011	-	SD000040500ANZC2____K01
	5	11.0	21.0	32.0	0.8	ZC2	27.5	-	18.0	-	40.0	200	0.035	3.5	-	0.011	-	SD000050500ANZC2____K01
	6	15.0	25.0	32.0	0.8	ZA1	27.5	-	15.0	-	40.0	240	0.027	4.5	-	0.011	-	SD000060500ANZA1____K01
	7	15.0	25.0	32.0	0.8	ZA1	27.5	-	13.0	-	40.0	280	0.027	5.0	-	0.011	-	SD000070500ANZA1____K01
	8	15.0	25.0	32.0	0.8	ZA1	27.5	-	12.0	-	40.0	320	0.027	6.0	-	0.011	-	SD000080500ANZA1____K01
	9	18.0	28.0	32.0	0.8	ZA3	27.5	-	11.0	-	40.0	360	0.022	7.0	-	0.011	-	SD000090500ANZA3____K01
	10	18.0	28.0	32.0	0.8	ZA3	27.5	-	10.0	-	40.0	400	0.022	7.0	-	0.011	-	SD000100500ANZA3____K01
	12	18.0	28.0	32.0	0.8	ZA3	27.5	-	8.0	-	40.0	480	0.022	8.0	-	0.011	-	SD000180500ANZA3____K01
	15	21.0	31.0	32.0	0.8	ZA4	27.5	-	7.0	-	40.0	600	0.019	9.0	-	0.011	-	SD000150500ANZA4____K01
	18	20.0	35.0	32.0	0.8	ZA5	27.5	-	6.0	-	40.0	720	0.017	9.0	-	0.011	-	SD000180500ANZA5____K01

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 70 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
500	20	18.5	35.5	43.0	1.0	ZA9	37.5	10.2	9.0	8.0	20.0	400	0.019	8.0	9.0	0.021	0.020	SD000200500ANZA9____K01
	22	21.5	38.5	43.0	1.0	ZB1	37.5	10.2	9.0	7.0	20.0	440	0.016	9.0	10.0	0.021	0.020	SD000220500ANZB1____K01
	25	21.5	38.5	43.0	1.0	ZB1	37.5	10.2	8.0	6.0	20.0	500	0.016	9.0	10.0	0.021	0.020	SD000250500ANZB1____K01
	30	24.0	44.0	42.0	1.0	ZA6	37.5	10.2	7.0	5.0	20.0	600	0.014	11.0	13.0	0.021	0.020	SD000300500ANZA6____K01
	35	24.0	44.0	42.0	1.0	ZA6	37.5	10.2	6.0	4.5	20.0	700	0.014	12.0	14.0	0.021	0.020	SD000350500ANZA6____K01
	40	30.0	45.0	42.0	1.0	ZA7	37.5	10.2/20.3	5.0	4.0	20.0	800	0.012	13.0	15.0	0.021	0.020	SD000400500ANZA7____K01
	45	30.0	45.0	42.0	1.0	ZA7	37.5	10.2/20.3	4.5	3.5	20.0	900	0.012	14.0	16.0	0.021	0.020	SD000450500ANZA7____K01
	50	30.0	45.0	42.0	1.0	ZA7	37.5	10.2/20.3	4.0	3.0	20.0	1000	0.012	15.0	17.0	0.021	0.020	SD000500500ANZA7____K01
	55	30.0	57.0	42.0	1.0	ZA8	37.5	20.3	3.5	3.0	20.0	1100	0.012	16.0	18.0	0.021	0.020	SD000550500ANZA8____K01
	60	30.0	57.0	42.0	1.0	ZA8	37.5	20.3	3.5	3.0	20.0	1200	0.012	16.0	18.0	0.021	0.020	SD000600500ANZA8____K01
	65	30.0	57.0	42.0	1.0	ZA8	37.5	20.3	2.5	2.0	20.0	1300	0.012	18.0	19.0	0.021	0.020	SD000650500ANZA8____K01

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 50 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
500	50	25.0	45.0	57.5	1.2	ZB2	52.5	10.2	7.0	6.0	10.0	500	0.013	10.0	11.0	0.045	0.04	SD000500500ANZB2____K01
	55	25.0	45.0	57.5	1.2	ZB2	52.5	10.2	7.0	6.0	10.0	550	0.013	11.0	13.0	0.045	0.04	SD000550500ANZB2____K01
	60	30.0	45.0	57.5	1.2	ZB3	52.5	20.3	6.0	5.0	10.0	600	0.012	12.0	14.0	0.045	0.04	SD000600500ANZB3____K01
	65	30.0	45.0	57.5	1.2	ZB3	52.5	20.3	6.0	5.0	10.0	650	0.012	12.0	14.0	0.045	0.04	SD000650500ANZB3____K01
	70	30.0	45.0	57.5	1.2	ZB3	52.5	20.3	6.0	5.0	10.0	700	0.012	13.0	15.0	0.045	0.04	SD000700500ANZB3____K01
	75	35.0	50.0	57.5	1.2	ZB4	52.5	20.3	5.0	4.0	10.0	750	0.010	14.0	16.0	0.045	0.04	SD000750500ANZB4____K01
	80	35.0	50.0	57.5	1.2	ZB4	52.5	20.3	4.5	3.0	10.0	800	0.010	15.0	17.0	0.045	0.04	SD000800500ANZB4____K01
	90	35.0	50.0	57.5	1.2	ZB4	52.5	20.3	4.0	3.0	10.0	900	0.010	16.0	18.0	0.045	0.04	SD000900500ANZB4____K01
	100	35.0	50.0	57.5	1.2	ZB4	52.5	20.3	4.0	3.0	10.0	1000	0.010	17.0	19.0	0.045	0.04	SD001000500ANZB4____K01
	110	45.0	45.0	57.5	1.2	ZB5	52.5	20.3	-	2.5	10.0	1100	0.011	-	19.0	-	0.045	SD001100500ANZB5____K01
	120	45.0	45.0	57.5	1.2	ZB5	52.5	20.3	-	2.5	10.0	1200	0.011	-	19.0	-	0.045	SD001200500ANZB5____K01
	250*	70.0	65.0	57.5	1.2	ZB6	52.5	20.3	-	-	4.0	1000	0.006	-	-	-	-	SD002500500ANZB6**006L**K01
	500**	130.0	65.0	57.5	1.2	ZB7	52.5	20.3	-	-	2.0	1000	0.004	-	-	-	-	SD005000500ANZB7**012L**K01

Notes :
1. * - 6 Pins (6L) & ** - 12 Pins (12L) 2. Δt ≤ 15 °C 3. Custom designed capacitors are available on request.

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Standard Capacitor Values

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 100 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
V_{OPDC} AT 70 °C = 720 V, V_{OPDC} AT 105 °C = 420 V																		
600	1	9	19	32	0.8	ZC1	27.5	-	55	-	50	50	0.041	2.5	-	0.0085	-	SD000010600ANZC1____K01
	2	9	19	32	0.8	ZC1	27.5	-	35	-	50	100	0.041	3	-	0.0085	-	SD000020600ANZC1____K01
	3	11	21	32	0.8	ZC2	27.5	-	23	-	50	150	0.035	4	-	0.0085	-	SD000030600ANZC2____K01
	4	11	21	32	0.8	ZC2	27.5	-	21	-	50	200	0.035	4	-	0.0085	-	SD000040600ANZC2____K01
	5	13	23	32	0.8	ZA2	27.5	-	17	-	50	250	0.031	5	-	0.0085	-	SD000050600ANZA2____K01
	6	15	25	32	0.8	ZA1	27.5	-	14	-	50	300	0.027	6	-	0.0085	-	SD000060600ANZA1____K01
	7	15	25	32	0.8	ZA1	27.5	-	12	-	50	350	0.027	6	-	0.0085	-	SD000070600ANZA1____K01
	8	18	28	32	0.8	ZA3	27.5	-	9	-	50	400	0.022	8	-	0.0085	-	SD000080600ANZA3____K01
	9	18	28	32	0.8	ZA3	27.5	-	9	-	50	450	0.022	8	-	0.0085	-	SD000090600ANZA3____K01
	10	18	28	32	0.8	ZA3	27.5	-	8	-	50	500	0.022	9	-	0.0085	-	SD000100600ANZA3____K01
	12	21	31	32	0.8	ZA4	27.5	-	7	-	50	600	0.019	10	-	0.0085	-	SD000120600ANZA4____K01
	15	20	35	32	0.8	ZA5	27.5	-	6	-	50	750	0.017	10	-	0.0085	-	SD000150600ANZA5____K01

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 70 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
600	10	18.5	35.5	43	1.0	ZA9	37.5	10.2	14	12	25	250	0.019	7	8	0.016	0.014	SD000100600ANZA9____K01
	12	18.5	35.5	43	1.0	ZA9	37.5	10.2	12	10	25	300	0.019	8	8.5	0.016	0.014	SD000120600ANZA9____K01
	15	18.5	35.5	43	1.0	ZA9	37.5	10.2	9	8	25	375	0.019	9	9.5	0.016	0.014	SD000150600ANZA9____K01
	20	21.5	38.5	43	1.0	ZB1	37.5	10.2	7	6	25	500	0.016	11	12	0.016	0.014	SD000200600ANZB1____K01
	22	21.5	38.5	43	1.0	ZB1	37.5	10.2	8	7	25	550	0.016	10	11.5	0.016	0.014	SD000220600ANZB1____K01
	25	21.5	38.5	43	1.0	ZB1	37.5	10.2	7	6	25	625	0.016	11	12	0.016	0.014	SD000250600ANZB1____K01
	30	24	44	42	1.0	ZA6	37.5	10.2	6	5	25	750	0.014	13	13.5	0.016	0.014	SD000300600ANZA6____K01
	35	30	45	42	1.0	ZA7	37.5	10.2/20.3	4	3.5	25	875	0.012	17	18	0.016	0.014	SD000350600ANZA7____K01
	40	30	45	42	1.0	ZA7	37.5	10.2/20.3	4	3.5	25	1000	0.012	17	18	0.016	0.014	SD000400600ANZA7____K01
	45	30	45	42	1.0	ZA7	37.5	10.2/20.3	4	3.5	25	1125	0.012	17	18	0.016	0.014	SD000450600ANZA7____K01
	50	30	57	42	1.0	ZA8	37.5	20.3	3	2.5	25	1250	0.012	18	19	0.016	0.014	SD000500600ANZA8____K01

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 50 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
600	40	25.0	45.0	57.5	1.2	ZB2	52.5	10.2	7.0	6.0	14.0	560	0.013	12.5	13.5	0.035	0.03	SD000400600ANZB2____K01
	45	25.0	45.0	57.5	1.2	ZB2	52.5	10.2	7.0	6.0	14.0	630	0.013	12.0	13.0	0.035	0.03	SD000450600ANZB2____K01
	50	30.0	45.0	57.5	1.2	ZB3	52.5	20.3	6.0	5.0	14.0	700	0.012	14.0	15.5	0.035	0.03	SD000500600ANZB3____K01
	55	30.0	45.0	57.5	1.2	ZB3	52.5	20.3	6.0	5.0	14.0	770	0.012	14.0	15.5	0.035	0.03	SD000550600ANZB3____K01
	60	30.0	45.0	57.5	1.2	ZB3	52.5	20.3	5.0	4.0	14.0	840	0.012	15.0	17.0	0.035	0.03	SD000600600ANZB3____K01
	65	35.0	50.0	57.5	1.2	ZB4	52.5	20.3	4.0	3.5	14.0	910	0.010	18.0	20.0	0.035	0.03	SD000650600ANZB4____K01
	70	35.0	50.0	57.5	1.2	ZB4	52.5	20.3	4.5	4.0	14.0	980	0.010	18.0	19.0	0.035	0.03	SD000700600ANZB4____K01
	75	35.0	50.0	57.5	1.2	ZB4	52.5	20.3	4.0	3.5	14.0	1050	0.010	18.0	20.0	0.035	0.03	SD000750600ANZB4____K01
	80	35.0	50.0	57.5	1.2	ZB4	52.5	20.3	4.0	3.5	14.0	1120	0.010	18.0	20.0	0.035	0.03	SD000800600ANZB4____K01
	90	45.0	45.0	57.5	1.2	ZB5	52.5	20.3	-	3.0	14.0	1260	0.011	-	21.0	-	0.03	SD000900600ANZB5____K01
	100	45.0	45.0	57.5	1.2	ZB5	52.5	20.3	-	2.5	14.0	1400	0.011	-	23.0	-	0.03	SD001000600ANZB5____K01
	200*	70.0	65.0	57.5	1.2	ZB6	52.5	20.3	-	-	5.0	1000	0.006	-	-	-	-	SD002000600ANZB6**006L**K01
	400**	130.0	65.0	57.5	1.2	ZB7	52.5	20.3	-	-	2.5	1000	0.004	-	-	-	-	SD004000600ANZB7**012L**K01

Notes :
1. * - 6 Pins (6L) & ** - 12 Pins (12L) 2. Δt ≤ 15 °C 3. Custom designed capacitors are available on request.

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Standard Capacitor Values

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 100 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
V_{OPDC} AT 70 °C = 960 V, V_{OPDC} AT 105 °C = 560 V																		
800	1	9	19	32	0.8	ZC1	27.5	-	55	-	60	60	0.041	2.5	-	0.007	-	SD000010800ANZC1____K01
	2	9	19	32	0.8	ZC1	27.5	-	35	-	60	12	0.041	3	-	0.007	-	SD000020800ANZC1____K01
	3	11	21	32	0.8	ZC2	27.5	-	23	-	60	180	0.035	4	-	0.007	-	SD000030800ANZC2____K01
	4	13	23	32	0.8	ZA2	27.5	-	17	-	60	240	0.031	5	-	0.007	-	SD000040800ANZA2____K01
	5	15	25	32	0.8	ZA1	27.5	-	14	-	60	300	0.027	6	-	0.007	-	SD000050800ANZA1____K01
	6	18	28	32	0.8	ZA3	27.5	-	12	-	60	360	0.022	7	-	0.007	-	SD000060800ANZA3____K01
	7	18	28	32	0.8	ZA3	27.5	-	10	-	60	420	0.022	8	-	0.007	-	SD000070800ANZA3____K01
	8	18	28	32	0.8	ZA3	27.5	-	9	-	60	480	0.022	8	-	0.007	-	SD000080800ANZA3____K01
	9	21	31	32	0.8	ZA4	27.5	-	7.5	-	60	540	0.019	10	-	0.007	-	SD000090800ANZA4____K01
	10	21	31	32	0.8	ZA4	27.5	-	7	-	60	600	0.019	10	-	0.007	-	SD000100800ANZA4____K01
	12	20	35	32	0.8	ZA5	27.5	-	6	-	60	720	0.017	11	-	0.007	-	SD000120800ANZA5____K01

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 70 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
800	10	18.5	35.5	43	1.0	ZA9	37.5	10.2	14	12	35	350	0.019	7	8	0.014	0.012	SD000100800ANZA9____K01
	12	18.5	35.5	43	1.0	ZA9	37.5	10.2	12	10	35	420	0.019	8	8	0.014	0.012	SD000120800ANZA9____K01
	15	18.5	35.5	43	1.0	ZA9	37.5	10.2	9	8	35	525	0.019	9	9.5	0.014	0.012	SD000150800ANZA9____K01
	20	21.5	38.5	43	1.0	ZB1	37.5	10.2	7	6	35	700	0.016	11	12	0.014	0.012	SD000200800ANZB1____K01
	22	24	44	42	1.0	ZA6	37.5	10.2	6	5	35	770	0.014	13	14	0.014	0.012	SD000220800ANZA6____K01
	25	24	44	42	1.0	ZA6	37.5	10.2	6	5	35	875	0.014	13	14	0.014	0.012	SD000250800ANZA6____K01
	30	30	45	42	1.0	ZA7	37.5	10.2 / 20.3	5	4	35	1050	0.012	15.5	17	0.014	0.012	SD000300800ANZA7____K01
	35	30	45	42	1.0	ZA7	37.5	10.2 / 20.3	4	3.5	35	1225	0.012	17	18	0.014	0.012	SD000350800ANZA7____K01
	40	30	57	42	1.0	ZA8	37.5	20.3	3	2.5	35	1400	0.012	18	19	0.014	0.012	SD000400800ANZA8____K01

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 50 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
800	30	25	45	57.5	1.2	ZB2	52.5	10.2	9	8	18	540	0.013	11	12	0.028	0.024	SD000300800ANZB2____K01
	35	25	45	57.5	1.2	ZB2	52.5	10.2	8	7	18	630	0.013	12	12.5	0.028	0.024	SD000350800ANZB2____K01
	40	25	45	57.5	1.2	ZB2	52.5	10.2	7	6	18	720	0.013	12.5	13.5	0.028	0.024	SD000400800ANZB2____K01
	45	30	45	57.5	1.2	ZB3	52.5	20.3	6	5	18	810	0.012	14	15	0.028	0.024	SD000450800ANZB3____K01
	50	30	45	57.5	1.2	ZB3	52.5	20.3	6	5	18	900	0.012	14	15.5	0.028	0.024	SD000500800ANZB3____K01
	55	35	50	57.5	1.2	ZB4	52.5	20.3	5	4	18	990	0.01	17	18	0.028	0.024	SD000550800ANZB4____K01
	60	35	50	57.5	1.2	ZB4	52.5	20.3	5	4	18	1080	0.01	17	19	0.028	0.024	SD000600800ANZB4____K01
	65	35	50	57.5	1.2	ZB4	52.5	20.3	4	3.5	18	1170	0.01	19	20	0.028	0.024	SD000650800ANZB4____K01
	70	45	45	57.5	1.2	ZB5	52.5	20.3	-	3.5	18	1260	0.011	-	19.5	-	0.024	SD000700800ANZB5____K01
	75	45	45	57.5	1.2	ZB5	52.5	20.3	-	3.5	18	1350	0.011	-	19.5	-	0.024	SD000750800ANZB5____K01
	80	45	45	57.5	1.2	ZB5	52.5	20.3	-	3	18	1440	0.011	-	21	-	0.024	SD000800800ANZB5____K01
	160*	70	65	57.5	1.2	ZB6	52.5	20.3	-	-	8	1280	0.006	-	-	-	-	SD001600800ANZB6**006L**K01
	320**	130	65	57.5	1.2	ZB7	52.5	20.3	-	-	4	1280	0.004	-	-	-	-	SD003200800ANZB7**012L**K01

Notes :
1. * - 6 Pins (6L) & ** - 12 Pins (12L) 2. Δt ≤ 15 °C 3. Custom designed capacitors are available on request.

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Standard Capacitor Values

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 100 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
V_{OPDC} AT 70 °C = 1100 V, V_{OPDC} AT 105 °C = 650 V																		
900	1	9	19	32	0.8	ZC1	27.5	-	65	-	65	65	0.041	2	-	0.006	-	SD000010900ANZC1____K01
	2	11	21	32	0.8	ZC2	27.5	-	30	-	65	130	0.035	3	-	0.006	-	SD000020900ANZC2____K01
	3	13	23	32	0.8	ZA2	27.5	-	20	-	65	195	0.031	4	-	0.006	-	SD000030900ANZA2____K01
	4	15	25	32	0.8	ZA1	27.5	-	16	-	65	260	0.027	5	-	0.006	-	SD000040900ANZA1____K01
	5	18	28	32	0.8	ZA3	27.5	-	13	-	65	325	0.022	7	-	0.006	-	SD000050900ANZA3____K01
	6	18	28	32	0.8	ZA3	27.5	-	11	-	65	390	0.022	7	-	0.006	-	SD000060900ANZA3____K01
	7	21	31	32	0.8	ZA4	27.5	-	9	-	65	455	0.019	9	-	0.006	-	SD000070900ANZA4____K01
	8	21	31	32	0.8	ZA4	27.5	-	8	-	65	520	0.019	9	-	0.006	-	SD000080900ANZA4____K01
	9	20	35	32	0.8	ZA5	27.5	-	7	-	65	585	0.017	9	-	0.006	-	SD000090900ANZA5____K01
	10	20	35	32	0.8	ZA5	27.5	-	7	-	65	650	0.017	9	-	0.006	-	SD000100900ANZA5____K01

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 70 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
900	9	18.5	35.5	43	1.0	ZA9	37.5	10.2	14	12	35	315	0.019	7.5	8	0.012	0.011	SD000090900ANZA9____K01
	10	18.5	35.5	43	1.0	ZA9	37.5	10.2	13	11	35	350	0.019	7.5	8	0.012	0.011	SD000100900ANZA9____K01
	12	18.5	35.5	43	1.0	ZA9	37.5	10.2	11	9	35	420	0.019	8	9	0.012	0.011	SD000120900ANZA9____K01
	15	21.5	38.5	43	1.0	ZB1	37.5	10.2	9	8	35	525	0.016	10	10.5	0.012	0.011	SD000150900ANZB1____K01
	20	24	44	42	1.0	ZA6	37.5	10.2	6	5	35	700	0.014	13	14	0.012	0.011	SD000200900ANZA6____K01
	22	30	45	42	1.0	ZA7	37.5	10.2 / 20.3	6	5	35	770	0.012	14	15	0.012	0.011	SD000220900ANZA7____K01
	25	30	45	42	1.0	ZA7	37.5	10.2 / 20.3	5	4.5	35	875	0.012	15	16	0.012	0.011	SD000250900ANZA7____K01
	30	30	57	42	1.0	ZA8	37.5	20.3	4.5	4	35	1050	0.012	16.5	17.5	0.012	0.011	SD000300900ANZA8____K01
	35	30	57	42	1.0	ZA8	37.5	20.3	3.5	3	35	1225	0.012	18	19	0.012	0.011	SD000350900ANZA8____K01

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 50 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
900	30	25	45	57.5	1.2	ZB2	52.5	10.2	8	7	18	540	0.013	12	12.5	0.024	0.022	SD000300900ANZB2____K01
	35	30	45	57.5	1.2	ZB3	52.5	20.3	7	6	18	630	0.012	13	14	0.024	0.022	SD000350900ANZB3____K01
	40	30	45	57.5	1.2	ZB3	52.5	20.3	6	5	18	720	0.012	14	15	0.024	0.022	SD000400900ANZB3____K01
	45	35	50	57.5	1.2	ZB4	52.5	20.3	6	5	18	810	0.01	15.5	17	0.024	0.022	SD000450900ANZB4____K01
	50	35	50	57.5	1.2	ZB4	52.5	20.3	5	4.5	18	900	0.01	17	18	0.024	0.022	SD000500900ANZB4____K01
	55	45	45	57.5	1.2	ZB5	52.5	20.3	-	4	18	990	0.011	-	18	-	0.022	SD000550900ANZB5____K01
	60	45	45	57.5	1.2	ZB5	52.5	20.3	-	3.5	18	1080	0.011	-	19.5	-	0.022	SD000600900ANZB5____K01
	120*	70	65	57.5	1.2	ZB6	52.5	20.3	-	-	13	1560	0.006	-	-	-	-	SD001200900ANZB6**006L**K01
	240**	130	65	57.5	1.2	ZB7	52.5	20.3	-	-	6	1440	0.004	-	-	-	-	SD002400900ANZB7**012L**K01

Notes :
1. * - 6 Pins (6L) & ** - 12 Pins (12L) 2. Δt ≤ 15 °C 3. Custom designed capacitors are available on request.

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Standard Capacitor Values

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 100 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
V_{OPDC} AT 70 °C = 1200 V, V_{OPDC} AT 105 °C = 700 V																		
1000	1	9	19	32	0.8	ZC1	27.5	-	65	-	70	70	0.041	2	-	0.005	-	SD000011000ANZC1____K01
	2	13	23	32	0.8	ZA2	27.5	-	30	-	70	140	0.031	3.5	-	0.005	-	SD000021000ANZA2____K01
	3	15	25	32	0.8	ZA1	27.5	-	21	-	70	210	0.027	5	-	0.005	-	SD000031000ANZA1____K01
	4	18	28	32	0.8	ZA3	27.5	-	16	-	70	280	0.022	6	-	0.005	-	SD000041000ANZA3____K01
	5	21	31	32	0.8	ZA4	27.5	-	13	-	70	350	0.019	7	-	0.005	-	SD000051000ANZA4____K01
	6	21	31	32	0.8	ZA4	27.5	-	10	-	70	420	0.019	8	-	0.005	-	SD000061000ANZA4____K01
	7	20	35	32	0.8	ZA5	27.5	-	9	-	70	490	0.017	9	-	0.005	-	SD000071000ANZA5____K01

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 70 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
1000	5	18.5	35.5	43	1.0	ZA9	37.5	10.2	21	19	35	175	0.019	6	6	0.01	0.009	SD000051000ANZA9____K01
	6	18.5	35.5	43	1.0	ZA9	37.5	10.2	18	16	35	210	0.019	6	7	0.01	0.009	SD000061000ANZA9____K01
	7	18.5	35.5	43	1.0	ZA9	37.5	10.2	18	16	35	245	0.019	6	7	0.01	0.009	SD000071000ANZA9____K01
	8	18.5	35.5	43	1.0	ZA9	37.5	10.2	16	14	35	280	0.019	7	7.5	0.01	0.009	SD000081000ANZA9____K01
	9	18.5	35.5	43	1.0	ZA9	37.5	10.2	14	12	35	315	0.019	7	8	0.01	0.009	SD000091000ANZA9____K01
	10	21.5	38.5	43	1.0	ZB1	37.5	10.2	12	11	35	350	0.016	8	9	0.01	0.009	SD000101000ANZB1____K01
	12	21.5	38.5	43	1.0	ZB1	37.5	10.2	10	9	35	420	0.016	9	10	0.01	0.009	SD000121000ANZB1____K01
	15	24	44	42	1.0	ZA6	37.5	10.2	8	7	35	525	0.014	11	12	0.01	0.009	SD000151000ANZA6____K01
	20	30	45	42	1.0	ZA7	37.5	10.2 / 20.3	6	5	35	700	0.012	14	15	0.01	0.009	SD000201000ANZA7____K01
	22	30	57	42	1.0	ZA8	37.5	20.3	6	5	35	770	0.012	14	15	0.01	0.009	SD000221000ANZA8____K01
	25	30	57	42	1.0	ZA8	37.5	20.3	4	3.5	35	875	0.012	16	17	0.01	0.009	SD000251000ANZA8____K01

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 50 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
1000	15	25	45	57.5	1.2	ZB2	52.5	10.2	14	12	18	270	0.013	9	9.5	0.021	0.019	SD000151000ANZB2____K01
	20	25	45	57.5	1.2	ZB2	52.5	10.2	12	11	18	360	0.013	9	10	0.021	0.019	SD000201000ANZB2____K01
	22	25	45	57.5	1.2	ZB2	52.5	10.2	11	10	18	396	0.013	10	10.5	0.021	0.019	SD000221000ANZB2____K01
	25	30	45	57.5	1.2	ZB3	52.5	20.3	10	9	18	450	0.012	11	11.5	0.021	0.019	SD000251000ANZB3____K01
	30	30	45	57.5	1.2	ZB3	52.5	20.3	8	7	18	540	0.012	12	13	0.021	0.019	SD000301000ANZB3____K01
	35	35	50	57.5	1.2	ZB4	52.5	20.3	7	6	18	630	0.01	14	15	0.021	0.019	SD000351000ANZB4____K01
	40	35	50	57.5	1.2	ZB4	52.5	20.3	6	5	18	720	0.01	15	17	0.021	0.019	SD000401000ANZB4____K01
	45	45	45	57.5	1.2	ZB5	52.5	20.3	-	5	18	810	0.011	-	16.5	-	0.019	SD000451000ANZB5____K01
	50	45	45	57.5	1.2	ZB5	52.5	20.3	-	4	18	900	0.011	-	18	-	0.019	SD000501000ANZB5____K01
	100*	70	65	57.5	1.2	ZB6	52.5	20.3	-	-	15	1500	0.006	-	-	-	-	SD001001000ANZB6**006L**K01
	200**	130	65	57.5	1.2	ZB7	52.5	20.3	-	-	7	1400	0.004	-	-	-	-	SD002001000ANZB7**012L**K01

Notes :
1. * - 6 Pins (6L) & ** - 12 Pins (12L) 2. Δt ≤ 15 °C 3. Custom designed capacitors are available on request.

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Standard Capacitor Values

V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 100 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
V_{OPDC} AT 70 °C = 1440 V, V_{OPDC} AT 105 °C = 850 V																		
1200	1	11	21	32	0.8	ZC2	27.5	-	45	-	85	85	0.035	3	-	0.0045	-	SD000011200ANZC2____K01
	2	15	25	32	0.8	ZA1	27.5	-	23	-	85	170	0.027	4	-	0.0045	-	SD000021200ANZA1____K01
	3	18	28	32	0.8	ZA3	27.5	-	15	-	85	255	0.022	6	-	0.0045	-	SD000031200ANZA3____K01
	4	21	31	32	0.8	ZA4	27.5	-	12	-	85	340	0.019	8	-	0.0045	-	SD000041200ANZA4____K01
	5	20	35	32	0.8	ZA5	27.5	-	10	-	85	425	0.017	8	-	0.0045	-	SD000051200ANZA5____K01
V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 70 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
1200	5	18.5	35.5	43	1.0	ZA9	37.5	10.2	18	16	40	200	0.019	6	7	0.009	0.008	SD000051200ANZA9____K01
	6	18.5	35.5	43	1.0	ZA9	37.5	10.2	15	14	40	240	0.019	7	7.5	0.009	0.008	SD000061200ANZA9____K01
	7	21.5	38.5	43	1.0	ZB1	37.5	10.2	13	12	40	280	0.016	8	8.5	0.009	0.008	SD000071200ANZB1____K01
	8	21.5	38.5	43	1.0	ZB1	37.5	10.2	11	10	40	320	0.016	9	9.5	0.009	0.008	SD000081200ANZB1____K01
	9	24	44	42	1.0	ZA6	37.5	10.2	10	9	40	360	0.014	10	10.5	0.009	0.008	SD000091200ANZA6____K01
	10	24	44	42	1.0	ZA6	37.5	10.2	9	8	40	400	0.014	10	11	0.009	0.008	SD000101200ANZA6____K01
	12	30	45	42	1.0	ZA7	37.5	10.2 / 20.3	8	7	40	480	0.012	12	13	0.009	0.008	SD000121200ANZA7____K01
	15	30	57	42	1.0	ZA8	37.5	20.3	6	5	40	600	0.012	14	14	0.009	0.008	SD000151200ANZA8____K01
V_{NDC}	CAP (µF)	Dimension (mm)				Case Code	P1 (mm)	P2 (mm)	Typical ESR@ 10 KHz to 50 KHz (mΩ)		dV/dt (V/µs)	Ipeak (A)	Rth (°C/mW)	I_{RMS} at 10 KHz, 85°C (A)		tanδ 10KHz		Ordering Code
		B	H	L	Ød				2 Pins	4 Pins				2 Pins	4 Pins	2 Pins	4 Pins	
1200	10	25	45	57.5	1.2	ZB2	52.5	10.2	18	16	20	200	0.013	8	8	0.018	0.016	SD000101200ANZB2____K01
	12	25	45	57.5	1.2	ZB2	52.5	10.2	15	13	20	240	0.013	8	9	0.018	0.016	SD000121200ANZB2____K01
	15	25	45	57.5	1.2	ZB2	52.5	10.2	12	11	20	300	0.013	9	10	0.018	0.016	SD000151200ANZB2____K01
	20	30	45	57.5	1.2	ZB3	52.5	20.3	9	8	20	400	0.012	11	12	0.018	0.016	SD000201200ANZB3____K01
	22	35	50	57.5	1.2	ZB4	52.5	20.3	8	7	20	440	0.01	13	14	0.018	0.016	SD000221200ANZB4____K01
	25	35	50	57.5	1.2	ZB4	52.5	20.3	7	6	20	500	0.01	14	15	0.018	0.016	SD000251200ANZB4____K01
	30	45	45	57.5	1.2	ZB5	52.5	20.3	-	5	20	600	0.011	-	16	-	0.016	SD000301200ANZB5____K01
	60	70	65	57.5	1.2	ZB6	52.5	20.3	-	-	20	1200	0.006	-	-	-	-	SD000601200ANZB6**006L**K01
	65*	70	65	57.5	1.2	ZB6	52.5	20.3	-	-	18	1170	0.006	-	-	-	-	SD000651200ANZB6**006L**K01
	140**	130	65	57.5	1.2	ZB7	52.5	20.3	-	-	10	1400	0.004	-	-	-	-	SD001401200ANZB7**012L**K01

Notes :
1. * - 6 Pins (6L) & ** - 12 Pins (12L) 2. Δt ≤ 15 °C 3. Custom designed capacitors are available on request.

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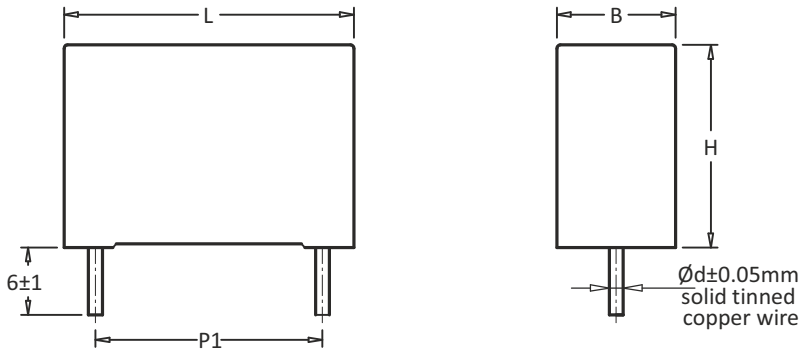
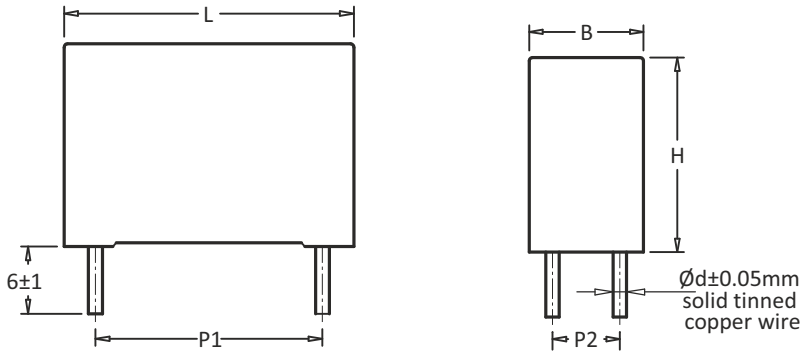
Capacitor Drawing And Terminal Style

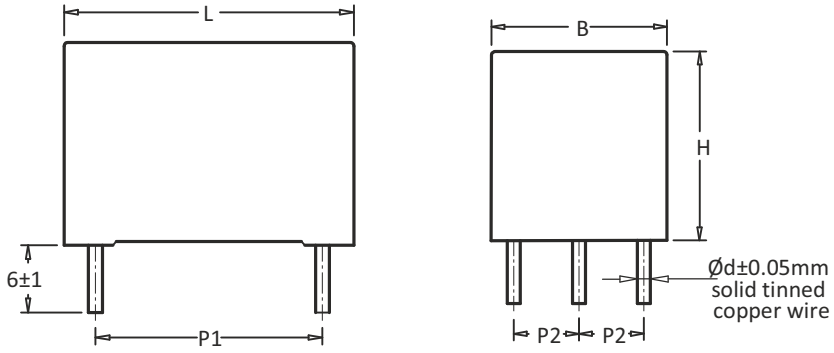
2L



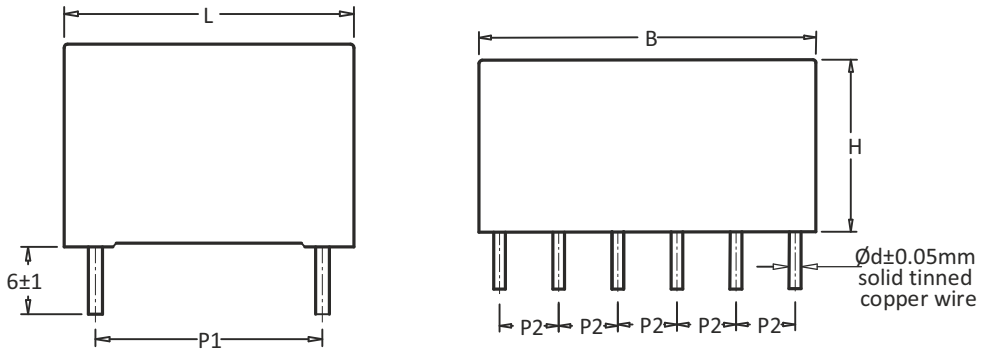
4L



6L



12L



Power Dissipation and Maximum Component Temperature Rise

The power dissipation is limited, so that the maximum allowed component temperature rise is not exceed as a function of the free air ambient temperature.

Component Temperature Rise

Component temperature rise is denoted by ΔT, and is calculated by ΔT = P x Rth
ΔT = Tcase - Tambient = case temperature rise (°C) with a maximum of 15 °C at rated temperature.

Where,

P is power dissipation of the component (mW)

Rth is thermal conductivity (°C/mW)

Method to measure the component temperature

The case temperature is measured in unloaded condition (Tamb) and loaded condition (Tc). Capacitor is tested under closed area, free from air circulation to avoid external thermal radiation.

Limiting conditions and application notes

These types of capacitors are not suitable for mains applications as across-the-line capacitors without additional protection. These mains applications are strictly regulated in safety standards and therefore electromagnetic interference suppression capacitors conforming the standards must be used.

Before we select capacitors for certain application, we must go through the following conditions:

I. The continuous peak voltage should not exceed the rated DC voltage.

II. The peak-to-peak ripple voltage should be less than 0.2 X V_{NDC}.

III. When capacitors are connected in parallel, the proof voltage (high pot) and the rated voltage must be reduced.

IV. The voltage peak slope should not exceed the pulse slope at the DC voltage rating.

Maximum repetitive peak voltages

Repetitive surge voltage	Maximum duration per day
1.1 x V_{NDC}	30 % of on load duration
1.15 x V_{NDC}	30 min
1.2 x V_{NDC}	5 min
1.3 x V_{NDC}	1 min
1.5 x V_{NDC}	110 ms

Abbreviation Used

1. V_{NDC} : Rated DC voltage
2. V_{OPDC} : Operating DC voltage
3. ESR : Equivalent series resistance
4. I_{peak} : Maximum peak current
5. I_{RMS} (max) : Maximum allowable current at 85^{O}C specified in standard capacitor value table
6. I_{RMS} (operational) : Operational RMS (Root Mean Square) current.
7. tanδ : tangent of the loss angle of a capacitor.

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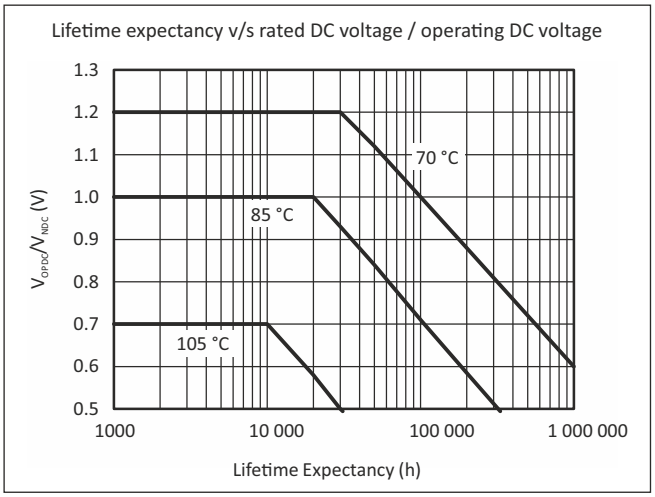
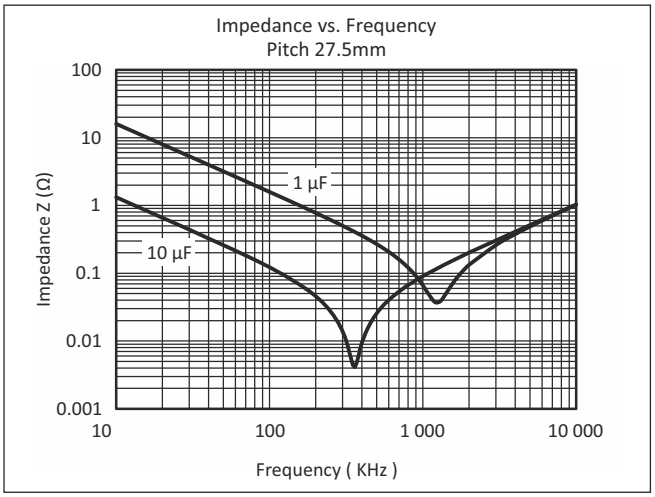
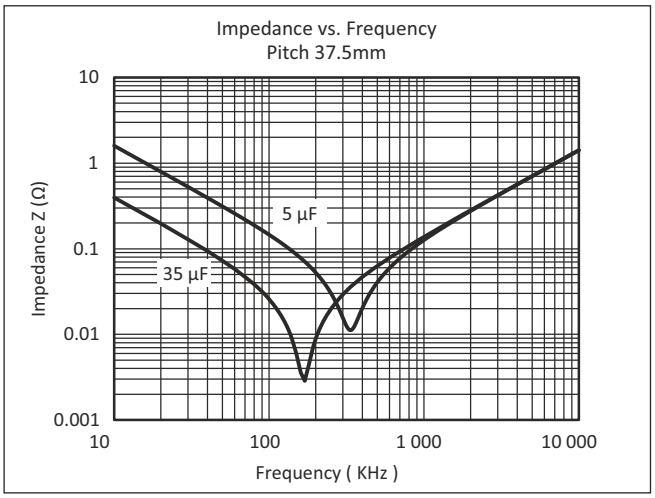
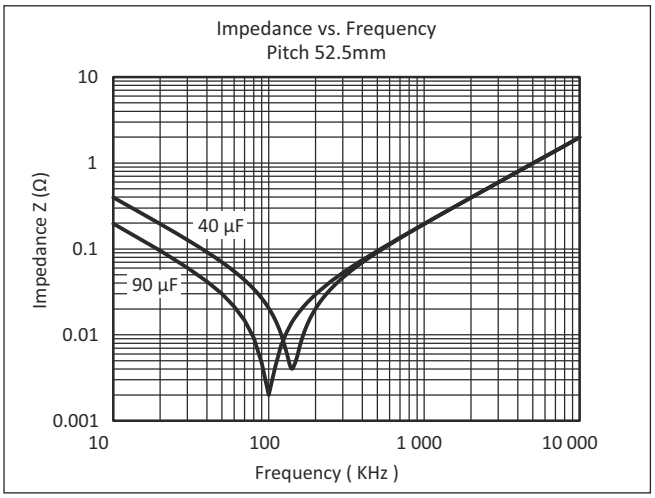
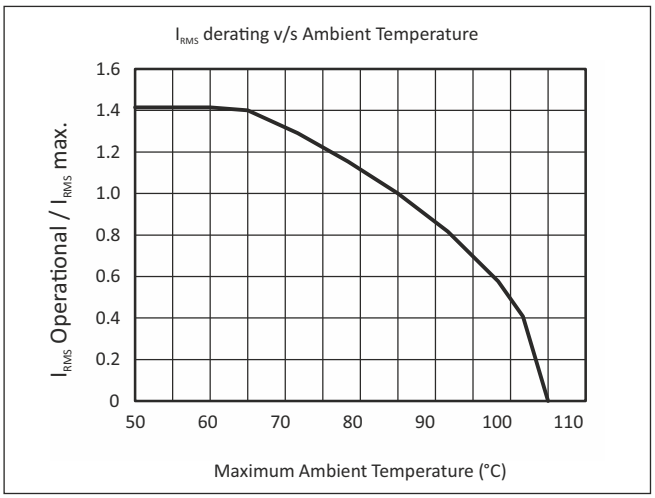
Dearating Graphs





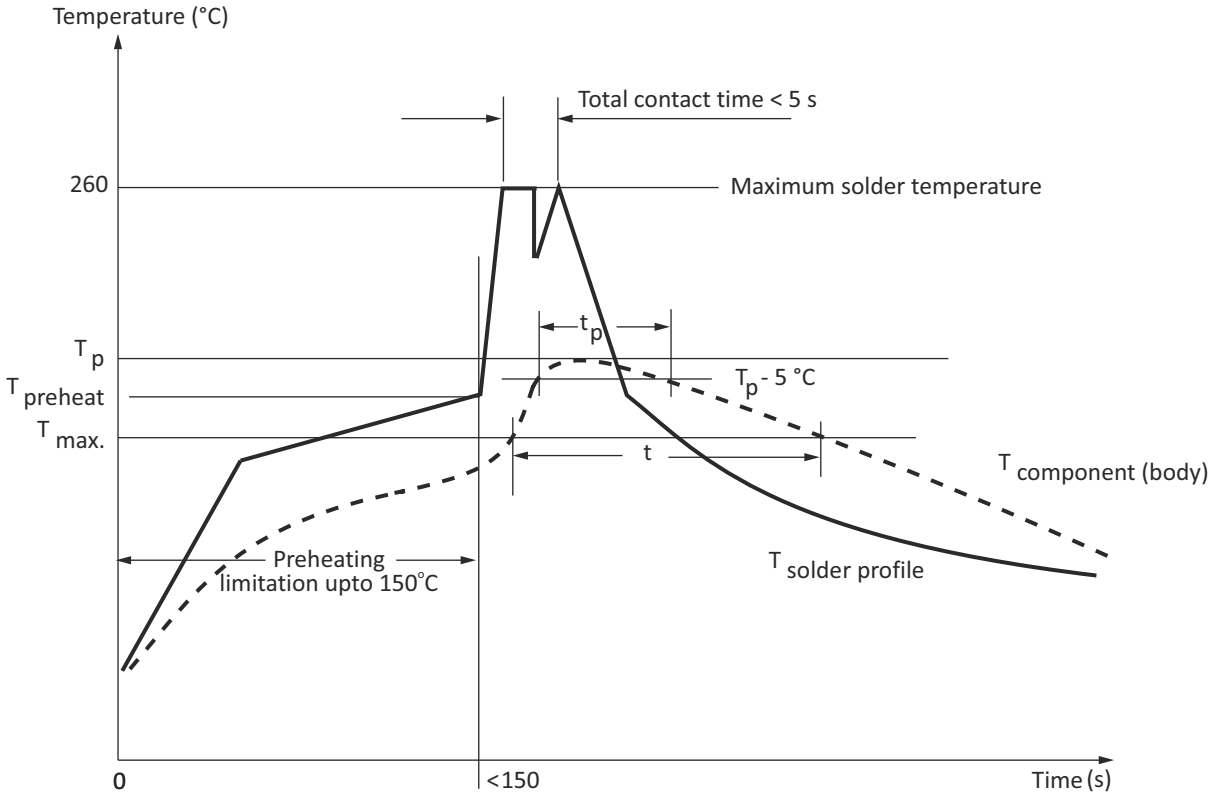






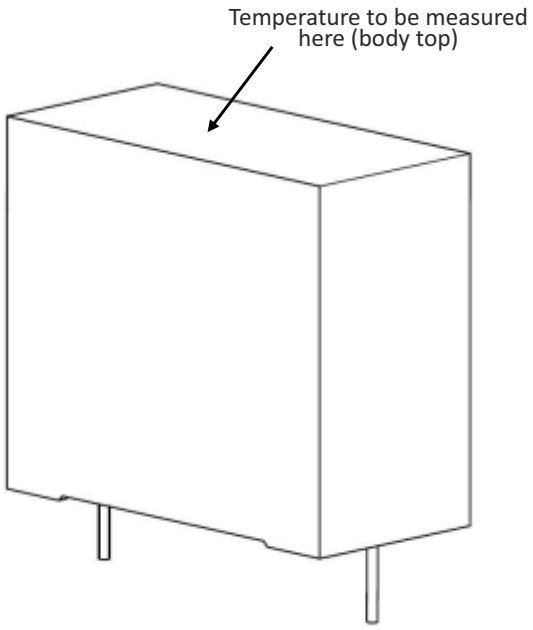
Soldering Guidelines

Recommended wave soldering profile



T_p: Peak temperature of the component body (top)

$T_{max.}$: Maximum application temperature of the component



Soldering Guidelines

Warnings

If preheating or soldering is done above the recommended limits then it can result in product damage and malfunctioning, thus it should be strictly avoided. There is a huge possibility of change in products parameters like capacitance value, tan δ, insulation resistance, etc if preheating or soldering limits have been exceeded at any point in time during the soldering process. Exceeding preheating or soldering limits can even result in destruction of the product.

Soldering Conditions For Manual Soldering

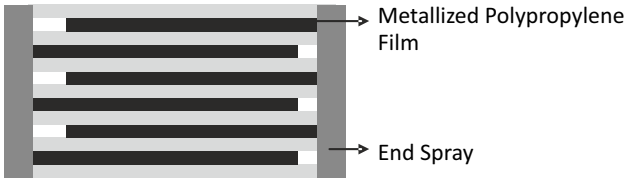
1. Using soldering iron with sufficient wattage and a regulated temperature is necessary. The quality of soldering iron is judged by the amount of time needed to reflow the solder. Adjust the temperature at beginning at 343°C, so that the solder re-flows within 1.5 s to 3s.
   - If the solder reflow occurs in less than 1 s to 1.5 s, then it indicated that the temperature at tip is excessive.
   - If solder reflow occurs in more than 3 s to 3.5 s, then it indicates either the tip temperature is insufficient or the tip is cooling down when applied to the circuit board.
2. Small amount of flux should be applied to the component lead terminals and the pad layout.
3. Once the iron is tinned, place the iron tip on the circuit pad at the edge far from the component. The soldering should be completed in between 1.5 s to 3 sec. But suppose we need to keep iron on longer than 3 s, replace the component with a fresh device.
4. Add the small amount of solder at the solder tip so that we can ensure that it flows from the pad to the termination of the component.
5. Don't touch the soldering iron to the component being worked on or any adjacent component.

DCL-23

Highlights

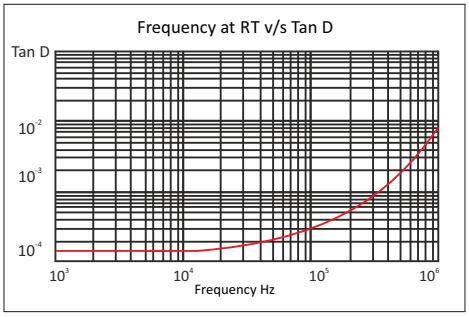
- Self-Inductance as low as 11nH
- ESR as low as 0.5 mΩ
- Low profile
- High thermal conductivity
- Life expectancy as high as 100 Khrs
- Integrated mounting flanges
- Flame retardant UL94 - V0, ROHS compliant

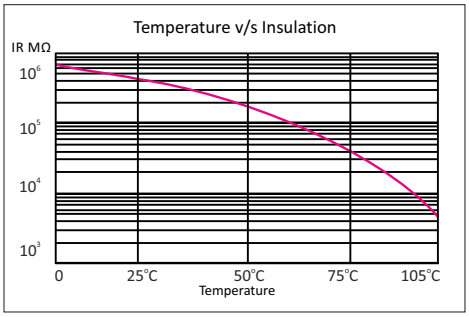
Construction

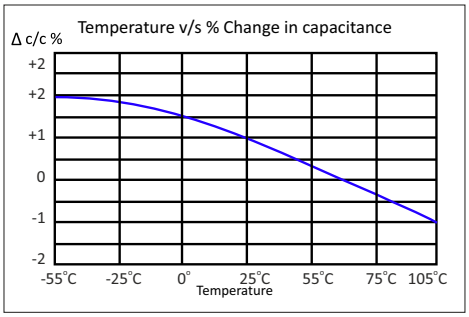


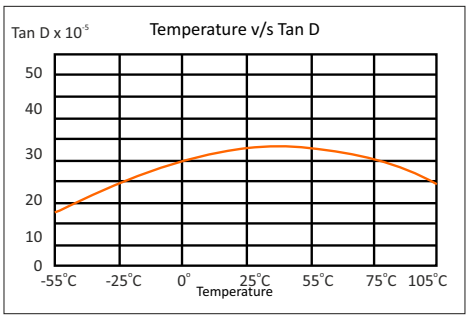
Applications

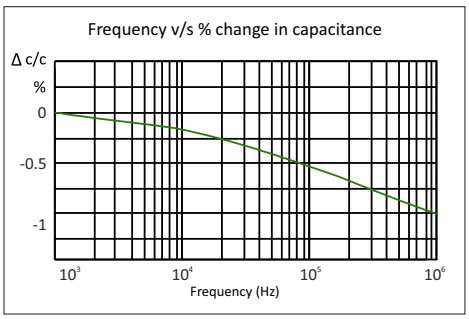
- DC filtering
- Wind power inverters
- Solar power inverters
- Induction heaters
- Electric vehicle inverters
- Motor drives











DCL-23

Technical Specifications

Physical Characteristics

▪ Electrode material	Metallized polypropylene film
▪ Winding construction	Polypropylene film, Metallized polypropylene film
▪ Enclosure	Preformed UL 94-V0 plastic case with thermosetting resin-fill
▪ Terminals	Nickel plated brass

Electrical Characteristics

▪ Capacitance range C_N	12 µF to 265µF
▪ Capacitance Tolerance	±5%(J), ±10%(K),
▪ Rated Voltage U_N	700,800,900,1000,1200,1400,1600,1800
▪ Dielectric strength between terminals (U_{T-T})	1.3 x rated voltage for 60 secs
▪ Test Voltage Terminal to case (U_{T-C})	Up to 3KVac at 50 Hz for 60sec
▪ Dissipation factor (Tanδ0)	≤0.0015 AT 100 Hz and 25°C
▪ Temperature range	-40°C to +105°C
▪ Insulation Resistance MΩ x µF	≥5,000S @ 25°C (S = MΩ x µF)
▪ Reference slandered	IEC 61071 and IEC 60068

Marking on Capacitors

Each capacitor will have the following information printed on it, sequentially:

- The Company's symbol followed by the words ALCON
- The capacitor grade viz DCL-23
- The capacitance value MFD
- The rated voltage VDC
- The max current Arms
- Capacity tolerance and manufacturing code
- Part number on non-standard capacitors

DCL-23

Standard Capacitors Values

Rated voltage VDC	Nominal Capacitance MFD at 1 KHz	Case size ϕ x Lmm	Case Code	Typical ESR mΩ at Fr* KHz	Fr** KHz	Rise in core temperature per watt dissipated℃	Ripple current rating Irms at 10 KHz to 100KHz				Ordering Code
							25˚C	45˚C	65˚C	85˚C	
700	85	85 X 40	Y1	0.65	156	8.8	91	79	66	46	SD000850700AQ0Y1----K01
	100	85 x 51	Y2	0.75	105	6.8	96	83	69	49	SD001000700AQ0Y2----K01
	142	85 x 51	Y2	0.75	105	6.8	96	83	69	49	SD001420700AQ0Y2----K01
	205	84 x 64	Y3	0.95	71	4.5	87	75	63	44	SD002050700AQ0Y3----K01
	265	85 x 79	Y4	1.65	61	3.3	77	67	55	39	SD002650700AQ0Y4----K01
800	70	85 x 40	Y1	0.56	168	8.8	86	74	61	42	SD000700800AQ0Y1----K01
	88	85 x 40	Y1	0.65	156	8.8	91	79	66	46	SD000880800AQ0Y1----K01
	140	85 x 51	Y2	0.75	105	6.8	96	83	69	49	SD001400800AQ0Y2----K01
	200	85 x 64	Y3	0.95	71	4.5	87	75	63	44	SD002000800AQ0Y3----K01
	260	85 x 79	Y4	1.65	61	3.3	77	67	55	39	SD002600800AQ0Y4----K01
900	65	85 x 40	Y1	0.50	68	8.8	84	92	59	40	SD000650900AQ0Y1----K01
	100	85 x 51	Y2	0.78	98	8.8	93	81	71	51	SD001000900AQ0Y2----K01
	150	85 x 64	Y3	0.97	73	6.8	85	76	64	45	SD001500900AQ0Y3----K01
	200	85 x 79	Y4	1.70	69	4.5	75	65	53	37	SD002000900AQ0Y4----K01
1000	47	85 x 40	Y1	0.80	176	8.8	85	73	62	38	SD000471000AQ0Y1----K01
	52	85 x 40	Y1	1.00	182	8.8	87	75	63	44	SD000521000AQ0Y1----K01
	88	85 x 51	Y2	0.80	136	6.8	89	77	64	45	SD000881000AQ0Y2----K01
	120	85 x 64	Y3	1.18	91	4.5	78	68	56	40	SD001201000AQ0Y3----K01
	170	85 x 79	Y4	2.11	75	3.3	69	60	50	35	SD001701000AQ0Y4----K01
1200	38	85 x 40	Y1	1.05	254	8.8	72	62	52	37	SD000381200AQ0Y1----K01
	63	85 x 51	Y2	1.19	179	8.8	74	64	53	38	SD000631200AQ0Y2----K01
	88	85 x 64	Y3	1.46	116	6.8	69	60	50	35	SD000881200AQ0Y3----K01
	118	85 x 79	Y4	2.80	96	4.5	57	49	41	29	SD001181200AQ0Y4----K01
1400	20	85 x 40	Y1	1.28	294	8.8	63	55	45	32	SD000201400AQ0Y1----K01
	34	85 x 51	Y2	1.47	218	8.8	64	55	46	33	SD000341400AQ0Y2----K01
	48	85 x 64	Y3	1.87	143	6.8	61	53	44	31	SD000481400AQ0Y3----K01
	64	85 x 89	Y4	3.81	124	4.5	52	45	37	27	SD000641400AQ0Y4----K01
1600	18	85 x 40	Y1	1.48	352	8.8	62	54	45	32	SD000181600AQ0Y1----K01
	30	85 x 51	Y2	1.71	260	8.8	62	54	45	32	SD000301600AQ0Y2----K01
	42	85 x 64	Y3	2.18	171	6.8	59	51	42	30	SD000421600AQ0Y3----K01
	55	85 x 79	Y4	4.56	151	4.5	48	42	35	24	SD000551600AQ0Y4----K01
1800	12	85 x 40	Y1	1.69	460	8.8	57	49	41	29	SD000121800AQ0Y1----K01
	21	85 x 51	Y2	1.86	236	8.8	58	50	42	30	SD000211800AQ0Y2----K01
	30	85 x 64	Y3	2.81	226	6.8	50	42	36	26	SD000301800AQ0Y3----K01
	40	85 x 79	Y4	5.63	185	4.5	43	37	31	22	SD000401800AQ0Y4----K01

Custom designed capacitors are available on request
Fr** =Typical resonant frequency (Tol.±30%)

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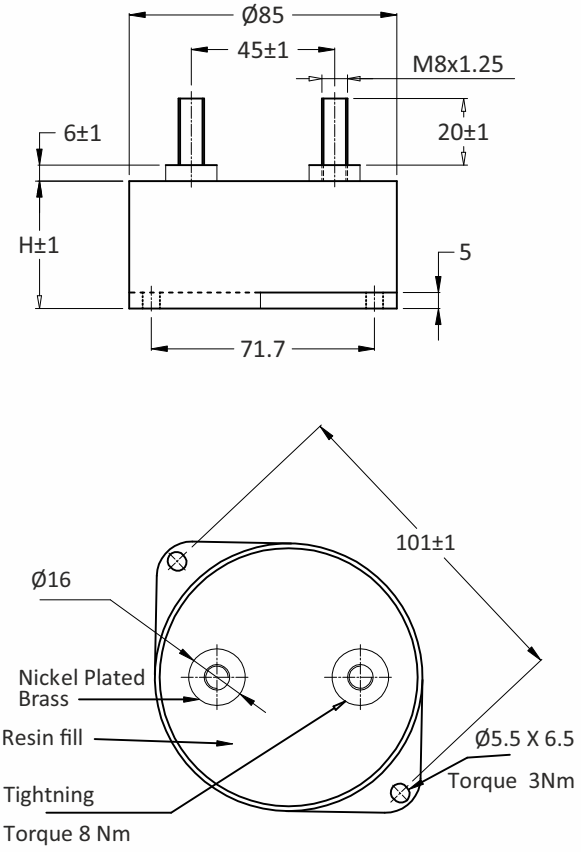
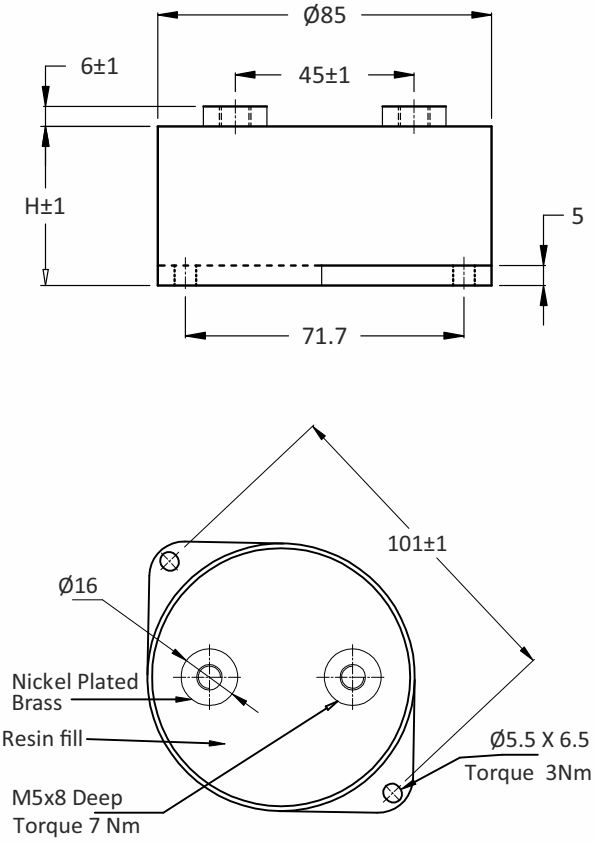
Capacitor Drawing and Terminal Styles

Terminal Style : MS



Dimensions in mm

Terminal Style : FS



Dimensions in mm

Life Expectancy

Steps to calculate Hotspot Temperature

1 Locate the capacitor and the ESR from the electrical specifications
2 Dissipated heat = (I_{rms}^2 x ESR)
3 Gat the value from table 1 for Rth (°C/Watt)
4 Calculate the internal temperature rise = (I_{rms}^2 x ESR) x Rth (°C/Watt)
5 Hotspot temperature of capacitor =T ambient +(I_{rms}^2 x ESR) x Rth (°C/Watt)
6 From the graph given below expected life can be calculated
7 Ensure that the voltage and current specification are not exceeded.

Can size D x H	Thermal resistance °C/Watt
85 x 40	8.8
85 x 51	6.8
85 x 64	4.5
85 x 79	3.3

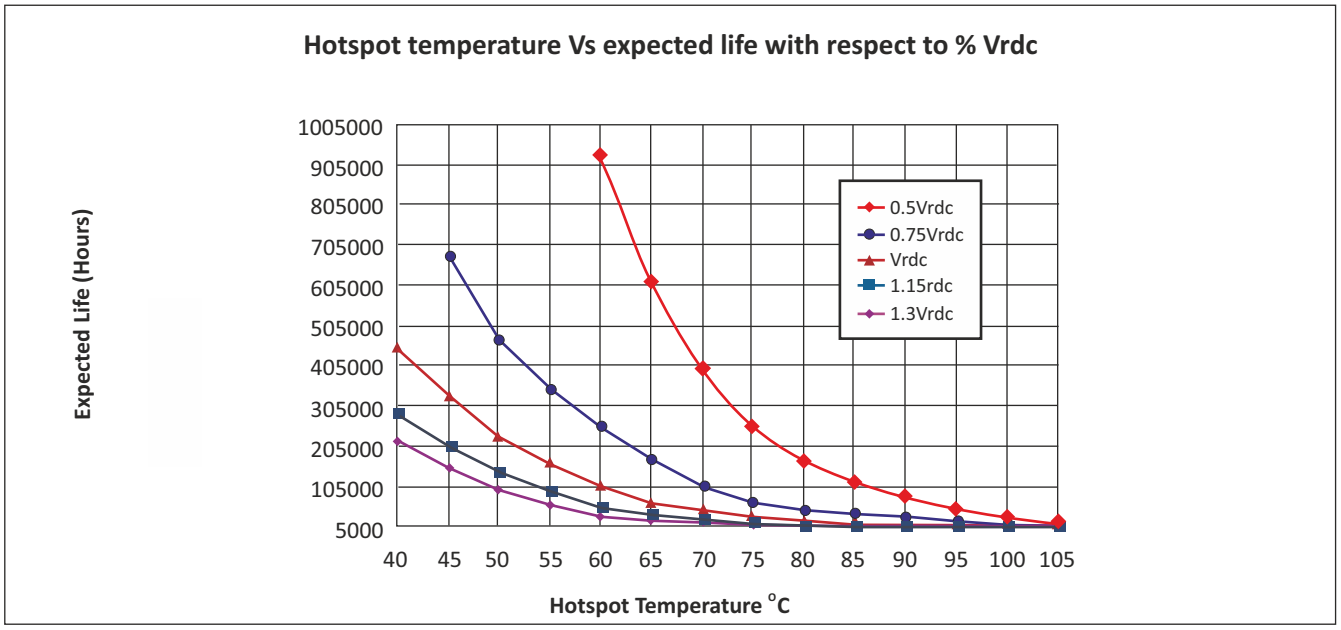
Example : If 85 MFD / 700 VDC is being used are 93 Arms in 45°C Ambient; then the ESR the table (on page 4) = 0.00065Ω and the case size is ϕ85 x 40 mm

The dissipated wattage=93 x 93 x 0.00065 =5.62 watt

Temperature rise = 5.62 x 8.8 (°C/Watt) =49.45°C

The hotspot core temperature inside the capacitor =45°C(Ambient)+ 49.45°C (Rise)=94.45 say 95°C

From the graph below: If the capacitor is being used at 75% of Vrdc then the expected life will be approx.480000 hours.



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Highlights

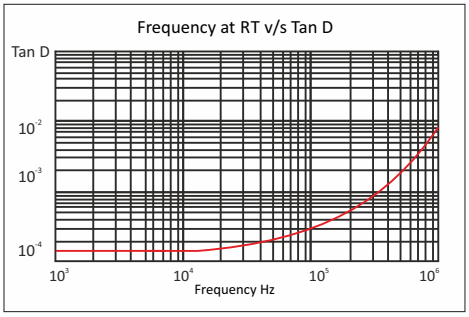
- High RMS current
- Low ESR
- Life Expectancy 100,000 Hours
- Fully encapsulated dry construction
- Flame retardant UL94 - V0, ROHS compliant
- Reference Standard: IEC 61071 and IEC 60068

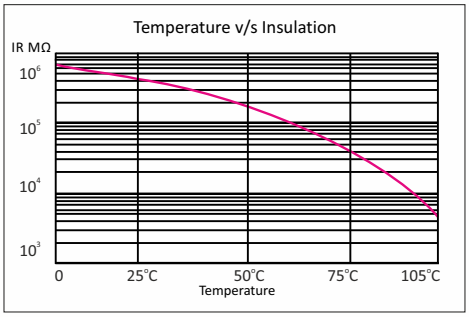
Construction

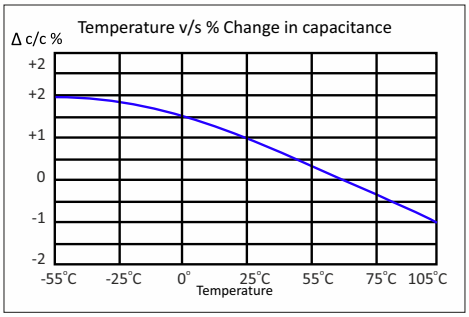
Applications

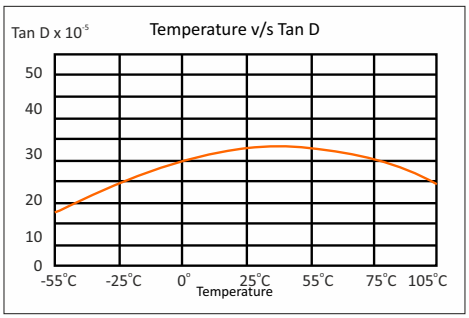
DC Link and DC Filter applications in Power converters for

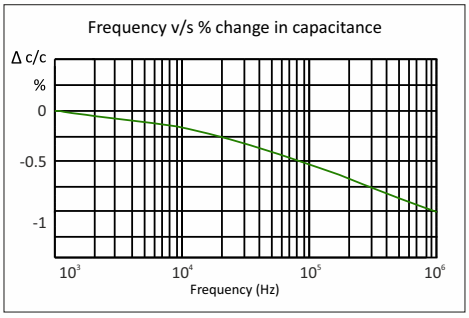
- Uninterruptible power supplies
- Wind power inverters
- Solar power inverters
- Traction and industrial drives.
- Impulse discharge capacitors for magnetizing and welding.











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Technical Specifications

Physical Characteristics

▪ Dielectric material	Polypropylene film
▪ Electrode material	Metallized polypropylene film
▪ Winding construction	Polypropylene film, metallized polypropylene film
▪ Enclosure	Aluminum can with preformed UL 94-V0 plastic top with thermosetting resin-fill
▪ Terminals	Nickel plated brass

Electrical Characteristics

▪ Capacitance range C_N	36 µF to 7400µF
▪ Capacitance Tolerance	K (±10%), J (±5%) on request
▪ Rated Voltage U_N	600 vdc to 3000 vdc
▪ Dissipation factor (Tanδ0)	0.0002
▪ Insulation Resistance MΩ x µF	5,000 S @ 25°C (S = MΩ x µF)
▪ Dielectric strength between terminals (U_{T-T})	1.5 x rated voltage for 60 secs
▪ Test Voltage Terminal to case (U_{T-C})	Up to 8400 Vac for 2sec at 50 Hz
▪ Operating Temperature (Θmin to Θmax)	-40°C to +85°C
▪ Storage temperature	-40°C to +85°C
▪ Endurance type test	ϕD 85 and ϕD100 @ 85°C ϕD 116 @ 80 °C ϕD 136 @ 75°C
▪ Life time	> 200000 h
▪ Reference service life	100000 h, Θhotspot ≤ 70°C
▪ Failure rate	50 FIT @ Vndc and + 70 °C
▪ Fire load	40 MJ/Kg
▪ Climatic category	40/85/56 for 75≤ϕD ≤100 40/75/56 for 116≤ϕD ≤ 136
▪ Maximum Hotspot Temperature	+85°C For diameter 85 ≤ ϕD ≤ 100 mm +80°C For diameter 100≤ ϕD ≤ 116 mm +75°C For diameter 116≤ ϕD ≤ 136 mm

Marking on Capacitors

Each capacitor will have the following information printed on it, sequentially:

- The Company's symbol followed by the words ALCON
- The capacitor grade viz DCL-41 and manufacturing date
- The capacitance value (MFD) and capacitance tolerance (%)
- The rated voltage VDC
- Test Voltage Terminal to Case (U_{T-C})
- Temperature range
- Maximum tightening torque (Nm)
- Type of cooling and temperature
- Reference slandered
- Additional data (Warning)
- Part number on non-standard capacitors

The following signs shall be added

- Self-healing capacitor
- Type of protection

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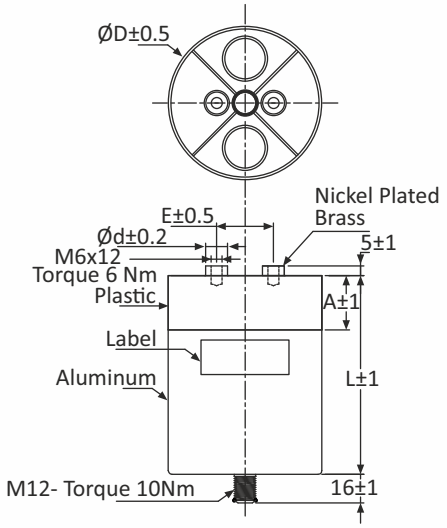
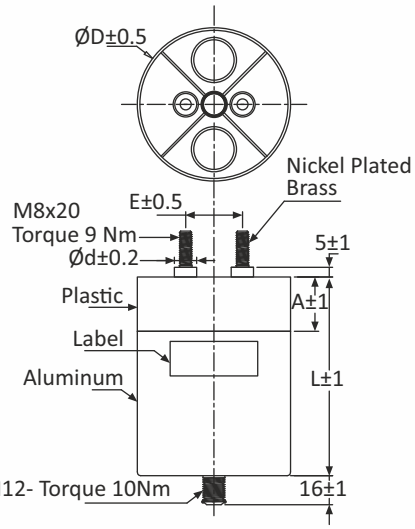
Capacitor Drawing and Terminal Styles (ϕD85, ϕD100 & ϕD116)

FD



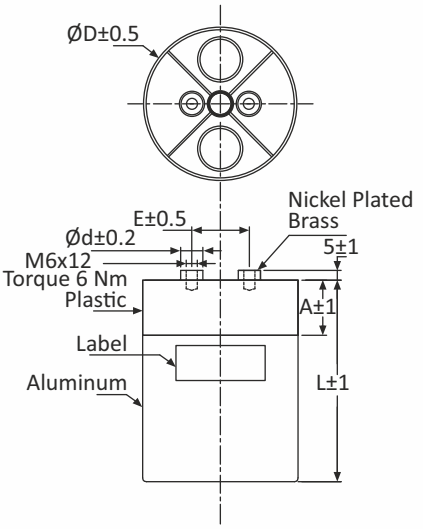
Dimensions in mm

MD



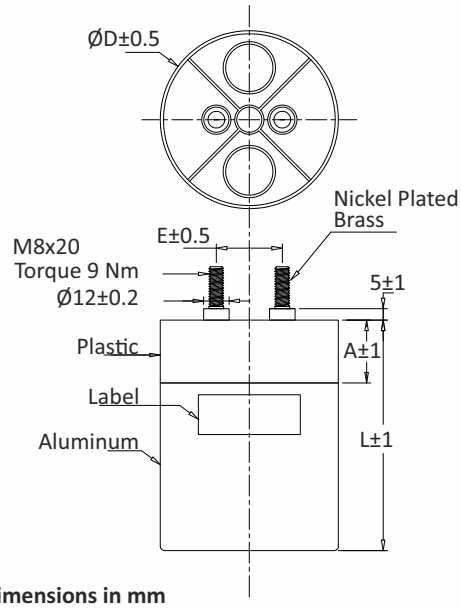
Dimensions in mm

FS



Dimensions in mm

MS



Dimensions in mm

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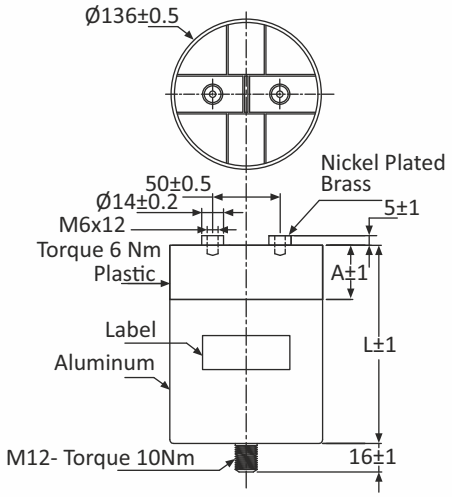
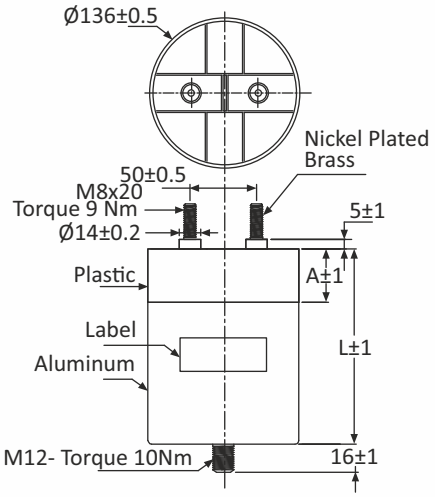
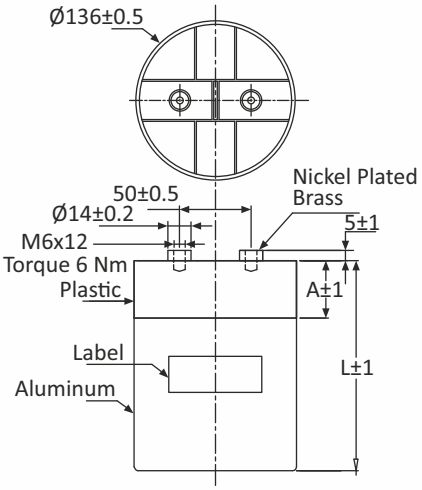
Capacitor Drawing and Terminal Styles (ϕD136)



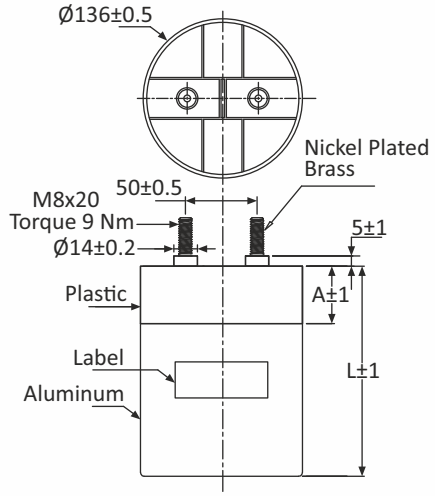
Dimensions in mm



Dimensions in mm



Dimensions in mm



Dimensions in mm

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Capacitor Drawing and Terminal Styles (ϕD136)

Diameter (ØD±0.5) mm	Terminal diameter (Ød±0.2) mm	Distance between terminals (E±0.5) mm	Plastic Top cover (A±1) mm
85	12	32	30
100	14	50	30
116	14	50	45
136	14	50	42.5

Terminals			
Terminal	Terminal type	Depth (mm)	Torque (Nm)
FD	M6	12	6
MD	M8	20	9
FS	M6	12	6
MS	M8	20	9
Bottom stud	M12	16	10
Other terminal configuration available on request			

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Standard Capacitor Values

U_N= 600V		Ur=100V		Us=900V		U_{T-T}=900VDC		U_{T-C}=3300 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
270	1.2	7.3	40	3.5	10.5	48.6	40	85 X78	FD/MD/FS/MS	0.5	SD002700600AR0Y8----K01
400	2	5.7	80	3.4	10.2	72.0	30	85 X100	FD/MD/FS/MS	0.4	SD004000600AR0S1----K01
380	1.8	6	40	3.6	10.8	68.4	30	85 X95	FD/MD/FS/MS	0.6	SD003800600AR0YA----K01
460	1.9	5.4	40	3.7	11.1	82.8	40	85X105	FD/MD/FS/MS	0.65	SD004600600AR0S1----K01
500	2.8	4.7	40	3.3	9.9	90.0	35	85 X120	FD/MD/FS/MS	0.9	SD005000600AR0SC----K01
550	2.9	4.6	40	3.4	10.2	99.0	40	85X125	FD/MD/FS/MS	0.75	SD005500600AR0S2----K01
560	2.8	4.4	40	3.4	10.2	100.8	40	85 X130	FD/MD/FS/MS	0.7	SD005600600AR0SD----K01
580	1.5	4.6	40	4.7	14.1	104.4	40	100X105	FD/MD/FS/MS	0.84	SD005800600AR0X1----K01
600	3.6	4.1	40	3.3	9.9	108.0	40	85X140	FD/MD/FS/MS	0.71	SD006000600AR0S3----K01
650	0.9	3.9	80	6.7	20.1	117.0	40	85 X146	FD/MD/FS/MS	0.6	SD006500600AR0SF----K01
660	0.9	3.8	60	6.5	19.5	118.8	40	85X150	FD/MD/FS/MS	0.9	SD006600600AR0S4----K01
680	0.8	3.8	100	6.4	19.2	122.4	40	85 X150	FD/MD/FS/MS	0.8	SD006800600AR0S4----K01
700	1.1	3.6	60	6.4	19.2	126.0	60	85X160	FD/MD/FS/MS	0.96	SD007000600AR0S5----K01
750	2.2	3.8	40	4.7	14.1	135.0	40	100X125	FD/MD/FS/MS	1	SD007500600AR0X2----K01
800	1.4	3.4	60	6.0	18	144.0	60	85X185	FD/MD/FS/MS	1.2	SD008000600AR0S6----K01
840	1.25	3.1	40	6.5	19.5	151.2	60	85 X181	FD/MD/FS/MS	1.3	SD008400600AR0SI----K01
900	1.1	3.2	60	9.7	29.1	162.0	40	100X140	FD/MD/FS/MS	1.3	SD009000600AR0X3----K01
940	0.9	3.1	60	9.3	27.9	169.2	40	100X150	FD/MD/FS/MS	1.4	SD009400600AR0X4----K01
980	0.8	3.1	80	9.2	27.6	176.4	45	100 X155	FD/MD/FS/MS	1.2	SD009800600AR0X5----K01
1000	1.6	2.3	60	12.6	37.8	180.0	40	116X125	FD/MD/FS/MS	1.1	SD010000600AR0R2----K01
1040	0.8	2.7	80	6.5	19.5	187.2	60	85 X210	FD/MD/FS/MS	1.2	SD010400600AR0SR----K01
1100	1.8	2.7	60	6.6	19.8	198.0	60	85X225	FD/MD/FS/MS	1.65	SD011000600AR0S7----K01
1260	0.5	2.6	80	13	39	226.8	40	116 X145	FD/MD/FS/MS	1.3	SD012600600AR0RD----K01
1360	1.1	2.3	60	10.3	30.9	244.8	60	100X185	FD/MD/FS/MS	1.2	SD013600600AR0X6----K01
1450	0.9	2.5	80	6.9	20.7	261.0	70	85X275	FD/MD/FS/MS	1.6	SD014500600AR0S9----K01
1400	1.1	2.3	80	7.2	21.6	252.0	60	85 X255	FD/MD/FS/MS	1	SD014000600AR0S8----K01
1440	0.6	2	60	14.2	42.6	259.2	40	116X150	FD/MD/FS/MS	1.5	SD014400600AR0R4----K01
1560	0.5	2.1	80	12.2	36.6	280.8	40	116 X180	FD/MD/FS/MS	1.9	SD015600600AR0RG----K01
1650	0.8	1.8	80	7.2	21.6	297.0	70	85X295	FD/MD/FS/MS	1.8	SD016500600ARS10----K01
1720	0.7	2.1	80	10.2	30.6	309.6	60	100X225	FD/MD/FS/MS	2.2	SD017200600AR0X7----K01
1800	0.7	2	60	13.6	40.8	324.0	60	116X185	FD/MD/FS/MS	2.1	SD018000600AR0R6----K01
2000	1.3	1.9	80	10.3	30.9	360.0	70	100X255	FD/MD/FS/MS	2.5	SD020000600AR0X8----K01
2100	0.6	1.3	80	9.9	29.7	378.0	70	100X275	FD/MD/FS/MS	2.8	SD021000600AR0X9----K01
2270	0.5	1.7	120	20.9	62.7	408.6	60	116 X220	FD/MD/FS/MS	2.1	SD022700600AR0RI----K01
3000	0.5	1.3	100	21.3	63.9	540.0	70	116X275	FD/MD/FS/MS	3.1	SD030000600AR0R9----K01
3300	0.4	1.3	120	22	66	594.0	75	116 X290	FD/MD/FS/MS	2.5	SD033000600AR0RL----K01
3700	0.4	1.1	120	20.6	61.8	666.0	70	116 X340	FD/MD/FS/MS	3.2	SD037000600AR0RM----K01
5100	0.3	1.1	120	26.8	80.4	738.0	40	136 X295	FD/MD/FS/MS	3.5	SD051000600AR0I5----K01
7000	0.6	0.9	120	27.0	81.0	1260.0	70	136X345	FD/MD/FS/MS	5.3	SD070000600AR0I6----K01
7400	0.5	0.9	80	19.0	57.0	1332	70	136x345	FD/MD/FS/MS	5.3	SD074000600AR0I6----K01

ESR at 1 kHz (typical value)

Weight is typical value

Other configuration and capacitance tolerance available up on request.

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Standard Capacitor Values

U_N= 700V		Ur=200V		Us=1050V		U_{T-T}=1050VDC		U_{T-C}=3300 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
360	2.4	5.4	40	2.80	8.40	88.2	40	85X105	FD/MD/FS/MS	0.65	SD003600700AR0S1----K01
410	1.1	6.7	40	3.60	10.8	100.5	30	85X85	FD/MD/FS/MS	0.5	SD004100700AR0Y9----K01
450	3.0	4.6	40	3.50	10.5	110.3	40	85X125	FD/MD/FS/MS	0.75	SD004500700AR0S2----K01
495	4.2	4.1	40	3.80	11.6	121.3	40	85X140	FD/MD/FS/MS	0.71	SD004950700AR0S3----K01
520	1.5	4.6	40	4.02	12.1	127.4	40	100X105	FD/MD/FS/MS	0.84	SD005200700AR0X1----K01
540	1.2	3.8	60	4.20	12.6	132.3	40	85X150	FD/MD/FS/MS	0.9	SD005400700AR0S4----K01
585	1.7	5.2	30	3.20	9.60	143.3	60	85X110	FD/MD/FS/MS	0.7	SD005850700AR0SB----K01
630	1.1	3.6	60	4.90	14.7	154.4	40	85X160	FD/MD/FS/MS	0.96	SD006300700AR0S5----K01
650	1.3	4.4	40	3.60	10.8	159.3	50	100X100	FD/MD/FS/MS	0.9	SD006500700AR0X1----K01
675	2.4	3.8	40	5.20	15.8	165.4	40	100X125	FD/MD/FS/MS	1.0	SD006750700AR0X2----K01
675	0.5	3.7	60	5.20	15.8	165.4	40	116X105	FD/MD/FS/MS	1.1	SD006750700AR0R1----K01
790	0.6	3.4	60	6.09	18.4	193.6	40	100X140	FD/MD/FS/MS	1.2	SD007900700AR0X3----K01
820	0.87	3.8	80	6.60	19.8	200.9	40	85X150	FD/MD/FS/MS	1.0	SD008200700AR0S4----K01
855	0.9	3.2	60	6.60	20.0	209.5	40	100X150	FD/MD/FS/MS	1.3	SD008550700AR0X4----K01
900	0.7	3.1	60	7.00	21.0	220.5	40	116X125	FD/MD/FS/MS	1.4	SD009000700AR0R2----K01
900	1.9	2.5	60	3.50	10.5	220.5	40	85X225	FD/MD/FS/MS	1.1	SD009000700AR0S7----K01
990	1.5	2.3	80	3.50	10.5	242.6	60	85X255	FD/MD/FS/MS	1.2	SD009900700AR0S8----K01
1035	1	2.6	60	4.10	12.3	253.6	60	100X185	FD/MD/FS/MS	1.4	SD010350700AR0X6----K01
1070	0.8	3.1	80	8.60	25.8	262.2	40	100X155	FD/MD/FS/MS	1.3	SD010700700AR0X5----K01
1080	0.5	2.7	60	8.40	25.2	264.6	40	116X140	FD/MD/FS/MS	1.64	SD010800700AR0R3----K01
1080	2.5	2.0	60	4.20	12.6	264.6	40	85X275	FD/MD/FS/MS	1.5	SD010800700AR0S9----K01
1170	1.5	2.7	60	6.50	19.5	286.7	60	85X210	FD/MD/FS/MS	1.3	SD011700700AR0SR----K01
1170	0.5	2.5	70	9.10	27.3	286.7	70	116X150	FD/MD/FS/MS	1.6	SD011700700AR0R4----K01
1260	2.1	1.8	60	4.90	14.7	308.7	50	85X295	FD/MD/FS/MS	1.9	SD012600700AR0SA----K01
1260	0.8	2.0	80	4.90	14.7	308.7	70	116X185	FD/MD/FS/MS	2.1	SD012600700AR0R6----K01
1350	1.25	2.1	60	5.50	16.5	330.8	60	100X225	FD/MD/FS/MS	2.2	SD013500700AR0X7----K01
1500	1.8	2.3	60	6.40	19.2	367.5	60	85X252	FD/MD/FS/MS	1.6	SD015000700AR0S8----K01
1575	1.5	1.9	80	6.00	18.0	385.9	70	100X255	FD/MD/FS/MS	2.5	SD015750700AR0X8----K01
1700	1.7	1.7	80	6.50	19.5	416.5	70	100X275	FD/MD/FS/MS	2.8	SD017000700AR0X9----K01
1800	0.7	1.6	90	7.00	21.0	441.0	60	116X225	FD/MD/FS/MS	2.6	SD018000700AR0R7----K01
2120	0.8	1.9	60	11.1	33.3	519.4	50	116X205	FD/MD/FS/MS	2.4	SD021200700AR0RH----K01
2150	0.4	1.4	100	8.50	25.5	526.8	60	116X255	FD/MD/FS/MS	2.8	SD021500700AR0R8----K01
2295	0.6	1.7	120	18.4	55.2	562.3	60	116X220	FD/MD/FS/MS	2.5	SD022950700AR0RI----K01
2350	0.5	1.3	100	9.00	27.0	575.8	70	116X275	FD/MD/FS/MS	3.1	SD023500700AR0R9----K01
3060	0.7	1.3	120	25.0	75.0	749.7	75	116X290	FD/MD/FS/MS	3.3	SD030600700AR0RL----K01
5200	0.7	0.9	120	25.0	75.0	1274.0	70	136X345	FD/MD/FS/MS	5.3	SD052000700AR0I6----K01
5540	0.8	0.9	60	16.0	48.0	1357.3	70	136X345	FD/MD/FS/MS	5.3	SD055400700AR0I6----K01

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Standard Capacitor Values

U_N= 900V		Ur=200V		Us=1350V		U_{T-T}=1350VDC		U_{T-C}=3360 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
220	1.2	7.3	40	2.40	7.20	89.1	40	85X78	FD/MD/FS/MS	0.5	SD002200900AR0Y8----K01
300	3.0	5.4	40	2.81	8.43	121.5	40	85X105	FD/MD/FS/MS	0.65	SD003000900AR0S1----K01
340	3.1	5.8	80	5.60	16.8	137.7	60	85X110	FD/MD/FS/MS	0.7	SD003400900AR0SB----K01
350	1.7	6.7	40	3.00	9.00	141.8	30	85X85	FD/MD/FS/MS	0.5	SD003500900AR0Y9----K01
360	3.6	4.6	40	3.40	10.2	145.8	40	85X125	FD/MD/FS/MS	0.75	SD003600900AR0S2----K01
430	2.1	4.6	40	4.04	12.12	174.2	40	100X105	FD/MD/FS/MS	0.84	SD004300900AR0X1----K01
430	4.5	4.1	40	4.08	12.24	174.2	40	85X140	FD/MD/FS/MS	0.71	SD004300900AR0S3----K01
450	2.7	5.2	40	2.80	8.40	182.3	60	85X110	FD/MD/FS/MS	0.7	SD004500900AR0SB----K01
475	1.2	3.8	60	4.46	13.38	192.4	40	85X150	FD/MD/FS/MS	0.9	SD004750900AR0S4----K01
495	1.1	3.6	60	4.68	14.04	200.5	60	85X160	FD/MD/FS/MS	0.96	SD004950900AR0S5----K01
540	2.3	3.8	40	5.10	15.3	218.7	40	100X125	FD/MD/FS/MS	1.0	SD005400900AR0X2----K01
540	0.9	3.7	60	5.10	15.3	218.7	40	116X105	FD/MD/FS/MS	1.1	SD005400900AR0R1----K01
590	0.9	4.2	80	6.40	19.2	239.0	40	85X136	FD/MD/FS/MS	0.8	SD005900900AR0SE----K01
610	1.1	3.7	80	5.60	16.8	247.1	40	85X155	FD/MD/FS/MS	1.0	SD006100900AR0SG----K01
630	0.8	3.4	60	5.95	17.85	255.2	50	100X140	FD/MD/FS/MS	1.2	SD006300900AR0X3----K01
700	0.9	3.7	80	6.10	18.3	283.5	30	85X150	FD/MD/FS/MS	1.0	SD007000900AR0S4----K01
700	1.2	3.2	60	6.59	19.77	283.5	50	100X150	FD/MD/FS/MS	1.3	SD007000900AR0X4----K01
720	0.8	3.1	60	6.80	20.4	291.6	40	116X125	FD/MD/FS/MS	1.4	SD007200900AR0R2----K01
720	1.5	2.3	60	3.44	10.32	291.6	60	85X225	FD/MD/FS/MS	1.1	SD007200900AR0S7----K01
855	1	2.3	80	4.04	12.12	346.3	60	85X255	FD/MD/FS/MS	1.2	SD008550900AR0S8----K01
855	1.3	2.6	60	4.04	12.12	346.3	50	100X185	FD/MD/FS/MS	1.4	SD008550900AR0X6----K01
855	1.3	2.7	60	8.08	24.24	346.3	40	116X140	FD/MD/FS/MS	1.7	SD008550900AR0R3----K01
920	3.4	2.0	60	4.34	13.02	372.6	70	85X275	FD/MD/FS/MS	1.5	SD009200900AR0S9----K01
945	1.3	2.5	60	8.93	26.79	382.7	50	116X150	FD/MD/FS/MS	1.6	SD009450900AR0R4----K01
990	3.3	1.8	60	4.68	14.04	401.0	60	85X295	FD/MD/FS/MS	1.9	SD009900900ARS10----K01
1060	1.6	2.5	80	5.80	17.4	429.3	60	85X225	FD/MD/FS/MS	1.4	SD010600900AR0S7----K01
1080	1.7	2.1	80	5.10	15.3	437.4	60	100X225	FD/MD/FS/MS	2.2	SD010800900AR0X7----K01
1080	1.2	2.0	60	5.10	15.3	437.4	60	116X185	FD/MD/FS/MS	2.1	SD010800900AR0R6----K01
1095	0.7	3.1	80	5.70	17.1	443.5	35	116X125	FD/MD/FS/MS	1.4	SD010950900AR0R2----K01
1150	2.3	2.3	80	5.70	17.1	465.8	60	85X252	FD/MD/FS/MS	1.6	SD011500900AR0SP----K01
1260	2.2	1.9	80	5.95	17.85	510.3	60	100X255	FD/MD/FS/MS	2.5	SD012600900AR0X8----K01
1310	0.7	2.5	120	11.4	34.2	530.6	45	116X155	FD/MD/FS/MS	1.8	SD013100900AR0RE----K01
1395	2.4	1.3	80	6.59	19.77	565.0	60	100X275	FD/MD/FS/MS	2.8	SD013950900AR0X9----K01
1440	1.2	1.6	80	6.80	20.4	583.2	60	116X225	FD/MD/FS/MS	2.6	SD014400900AR0R7----K01
1700	1	1.4	100	8.08	24.24	688.5	70	116X255	FD/MD/FS/MS	2.8	SD017000900AR0R8----K01
1740	1.2	2.1	80	5.70	17.1	704.7	50	116X180	FD/MD/FS/MS	2.1	SD017400900AR0RG----K01
1850	0.8	1.3	100	8.71	26.13	749.3	70	116X275	FD/MD/FS/MS	3.1	SD018500900AR0R9----K01
2620	0.6	1.3	120	22.8	68.4	1061.1	75	116X290	FD/MD/FS/MS	3.3	SD026200900AR0RL----K01
3380	1	1.1	80	13.0	39.0	1368.9	70	136X295	FD/MD/FS/MS	4.5	SD033800900AR0I5----K01
3660	0.6	1.1	120	31.8	95.4	1482.3	75	136X295	FD/MD/FS/MS	4.5	SD036600900AR0I5----K01
3880	0.5	1.1	120	16.0	48.0	1571.4	75	136X295	FD/MD/FS/MS	4.5	SD038800900AR0I5----K01
4000	0.7	0.9	120	21.6	64.8	1620.0	45	136X345	FD/MD/FS/MS	5.3	SD040000900AR0I6----K01
4590	0.7	0.9	120	23.9	71.7	1859.0	85	136X345	FD/MD/FS/MS	5.4	SD045900900AR0I6----K01

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Standard Capacitor Values

U_N= 1000V		Ur=250V		Us=1500V		U_{T-T}=1500VDC		U_{T-C}=3560 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
210	1.6	7.3	40	3.1	9.3	105	40	85 X78	FD/MD/FS/MS	0.5	SD002101000AR0Y8----K01
310	2	5.7	80	3	9	155	30	85 X100	FD/MD/FS/MS	0.4	SD003101000AR0SS----K01
310	1.8	6	40	3.3	9.9	155	30	85 X95	FD/MD/FS/MS	0.6	SD003101000AR0YA----K01
340	2.2	5.4	40	3.1	9.3	170	40	85X105	FD/MD/FS/MS	0.65	SD003401000AR0S1----K01
400	2.8	4.7	40	3	9	200	35	85 X120	FD/MD/FS/MS	0.9	SD004001000AR0SC----K01
410	2.7	4.6	40	2.9	8.7	205	40	85X125	FD/MD/FS/MS	0.75	SD004101000AR0S2----K01
480	3.2	4.4	40	3.2	9.6	240	40	85 X130	FD/MD/FS/MS	0.7	SD004801000AR0SD----K01
500	1.8	4.6	40	4.6	13.8	250	40	100X105	FD/MD/FS/MS	0.84	SD005001000AR0X1----K01
520	3.6	4.1	40	3.3	9.9	260	40	85X140	FD/MD/FS/MS	0.71	SD005201000AR0S3----K01
540	0.9	3.9	80	6.4	19.2	270	40	85 X146	FD/MD/FS/MS	0.6	SD005401000AR0SF----K01
550	1	3.8	60	6.2	18.6	275	40	85X150	FD/MD/FS/MS	0.9	SD005501000AR0S4----K01
550	0.6	3.8	100	6.3	18.9	275	40	85 X150	FD/MD/FS/MS	0.8	SD005501000AR0S4----K01
600	1.1	3.6	60	11.1	33.3	300	60	85X160	FD/MD/FS/MS	0.96	SD006001000AR0S5----K01
630	1.2	3.7	60	11.7	35.1	315	40	116X105	FD/MD/FS/MS	1.1	SD006301000AR0R1----K01
650	2.2	3.8	40	9.4	28.2	325	40	100X125	FD/MD/FS/MS	1	SD006501000AR0X2----K01
680	0.6	3.7	80	12.6	37.8	340	40	116 X105	FD/MD/FS/MS	1	SD006801000AR0R1----K01
720	1.4	3.4	60	9.3	27.9	360	60	85X185	FD/MD/FS/MS	1.2	SD007201000AR0S6----K01
750	4.5	3.1	40	10	30	375	60	85 X181	FD/MD/FS/MS	1.3	SD007501000AR0SI----K01
760	0.8	3.2	60	9.4	28.2	380	40	100X140	FD/MD/FS/MS	1.3	SD007601000AR0X3----K01
800	0.9	3.1	60	9	27	400	40	100X150	FD/MD/FS/MS	1.4	SD008001000AR0X4----K01
820	0.9	3.1	80	8.8	26.4	410	45	100 X155	FD/MD/FS/MS	1.2	SD008201000AR0X5----K01
850	1.6	2.3	60	12.2	36.6	425	40	116X125	FD/MD/FS/MS	1.1	SD008501000AR0R2----K01
870	0.8	2.7	80	9.6	28.8	435	60	85 X210	FD/MD/FS/MS	1.2	SD008701000AR0SR----K01
900	1.8	2.7	60	9.2	27.6	450	60	85X225	FD/MD/FS/MS	1.65	SD009001000AR0S7----K01
1000	0.5	2.6	80	11.8	35.4	500	40	116 X145	FD/MD/FS/MS	1.3	SD010001000AR0RD----K01
1050	0.5	2.6	60	11.9	35.7	525	60	116X140	FD/MD/FS/MS	1.4	SD010501000AR0R3----K01
1070	1.1	2.3	60	9.3	27.9	535	60	100X185	FD/MD/FS/MS	1.2	SD010701000AR0X6----K01
1100	0.9	2.5	80	8.9	26.7	550	70	85X275	FD/MD/FS/MS	1.6	SD011001000AR0S9----K01
1100	0.9	2.3	80	9.8	29.4	550	60	85 X255	FD/MD/FS/MS	1	SD011001000AR0S8----K01
1140	0.6	2	60	12.8	38.4	570	40	116X150	FD/MD/FS/MS	1.5	SD011401000AR0R4----K01
1150	0.5	2.1	80	10.3	30.9	575	40	116 X180	FD/MD/FS/MS	1.9	SD011501000AR0RG----K01
1200	1.1	1.8	80	8.99	26.97	600	70	85X295	FD/MD/FS/MS	1.8	SD012001000ARS10----K01
1250	0.6	2.1	80	12.8	38.4	625	60	100X225	FD/MD/FS/MS	2.2	SD012501000AR0X7----K01
1270	0.7	2.1	80	12.6	37.8	635	60	100 X230	FD/MD/FS/MS	1.6	SD012701000AR0XA----K01
1300	0.4	2	60	16.8	50.4	650	60	116X185	FD/MD/FS/MS	2.1	SD013001000AR0R6----K01
1340	0.8	1.9	80	11.8	35.4	670	70	100X255	FD/MD/FS/MS	2.5	SD013401000AR0X8----K01
1500	0.7	1.3	80	12.1	36.3	750	70	100X275	FD/MD/FS/MS	2.8	SD015001000AR0X9----K01
1640	0.5	1.7	120	17.2	51.6	820	60	116 X220	FD/MD/FS/MS	2.1	SD016401000AR0RI----K01
1720	0.5	1.6	80	17.6	52.8	860	70	116X225	FD/MD/FS/MS	2.6	SD017201000AR0R7----K01
2000	0.5	1.4	100	20.5	61.5	1000	70	116X255	FD/MD/FS/MS	2.8	SD020001000AR0R8----K01
2250	0.6	1.3	100	18.2	54.6	1125	70	116X275	FD/MD/FS/MS	3.1	SD022501000AR0R9----K01
2300	0.6	1.4	120	18.3	54.9	1150	70	116 X280	FD/MD/FS/MS	3.2	SD023001000AR0RK----K01
2500	0.6	1.3	120	19.1	57.3	1250	75	116 X290	FD/MD/FS/MS	2.5	SD025001000AR0RL----K01
3000	0.5	1.1	120	19.2	57.6	1500	70	116 X340	FD/MD/FS/MS	3.2	SD030001000AR0RM----K01
3550	0.4	1.1	120	26.6	79.8	1775	40	136 X295	FD/MD/FS/MS	3.5	SD035501000AR0I5----K01
4100	0.3	0.9	120	25.8	77.4	2050	70	136 X345	FD/MD/FS/MS	4.5	SD041001000AR0I6----K01
4200	0.3	0.9	120	26.4	79.2	2100	85	136 X 345	FD/MD/FS/MS	5.3	SD042001000AR0I6----K01

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Standard Capacitor Values

U_N= 1100V		Ur=250V		Us=1650V		U_{T-T}=1650VDC		U_{T-C}=3840 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
172	1.36	7.3	40	2.50	7.50	104.1	40	85 X78	FD/MD/FS/MS	0.5	SD001721100AR0Y8----K01
190	3.5	5.4	40	2.31	6.90	133.3	40	85X105	FD/MD/FS/MS	0.65	SD001901100AR0S1----K01
235	4.5	4.6	40	2.86	8.60	164.9	40	85X125	FD/MD/FS/MS	0.75	SD002351100AR0S2----K01
250	2.3	5.7	80	4.90	14.7	151.3	30	85 X100	FD/MD/FS/MS	0.4	SD002501100AR0SM----K01
280	1.7	6.0	40	2.50	7.50	169.4	30	85 X95	FD/MD/FS/MS	0.6	SD002801100AR0YA----K01
280	2.2	4.6	40	3.41	10.0	196.5	40	100X105	FD/MD/FS/MS	0.84	SD002801100AR0X1----K01
295	4.8	4.1	40	3.58	11.0	207.0	40	85X140	FD/MD/FS/MS	0.71	SD002951100AR0S3----K01
315	1.5	3.8	60	3.85	12.0	221.1	40	85X150	FD/MD/FS/MS	0.9	SD003151100AR0S4----K01
350	1.3	3.6	60	4.13	12.0	245.6	60	85X160	FD/MD/FS/MS	0.96	SD003501100AR0S5----K01
350	3.5	3.8	40	4.40	13.0	245.6	40	100X125	FD/MD/FS/MS	1.0	SD003501100AR0X2----K01
375	0.6	3.9	120	7.20	21.6	226.9	40	85 X146	FD/MD/FS/MS	0.6	SD003751100AR0SF----K01
380	1.8	4.7	40	2.40	7.20	229.9	35	85 X120	FD/MD/FS/MS	0.9	SD003801100AR0SC----K01
380	1	3.7	60	4.62	14.0	266.7	40	116X105	FD/MD/FS/MS	1.1	SD003801100AR0R1----K01
385	1.8	3.4	60	2.34	7.00	270.2	60	85X185	FD/MD/FS/MS	1.2	SD003851100AR0S6----K01
420	1.9	4.4	40	2.40	7.20	254.1	40	85 X130	FD/MD/FS/MS	0.7	SD004201100AR0SD----K01
420	1.2	3.2	60	5.06	15.0	294.8	40	100X140	FD/MD/FS/MS	1.3	SD004201100AR0X3----K01
450	1	3.8	80	5.00	15.0	272.3	40	85 X150	FD/MD/FS/MS	0.8	SD004501100AR0S4----K01
450	0.5	3.7	80	8.80	26.4	272.3	40	116 X105	FD/MD/FS/MS	1.0	SD004501100AR0R1----K01
460	1.2	3.1	60	5.61	17.0	322.8	40	100X150	FD/MD/FS/MS	1.4	SD004601100AR0X4----K01
470	1.2	2.3	60	5.72	17.0	329.8	40	116X125	FD/MD/FS/MS	1.1	SD004701100AR0R2----K01
560	1.7	2.3	60	3.41	10.0	393.0	60	100X185	FD/MD/FS/MS	1.2	SD005601100AR0X6----K01
580	0.8	3.1	80	6.20	18.6	350.9	45	100 X155	FD/MD/FS/MS	1.2	SD005801100AR0X5----K01
585	1.3	2.6	60	7.15	21.0	410.6	60	116X140	FD/MD/FS/MS	1.4	SD005851100AR0R3----K01
595	1.32	3.1	40	2.60	7.80	360.0	60	85 X181	FD/MD/FS/MS	1.3	SD005951100AR0SI----K01
595	1.7	2.7	60	3.63	11.0	417.6	60	85X225	FD/MD/FS/MS	1.65	SD005951100AR0S7----K01
630	1.3	2.0	60	7.70	23.0	442.1	40	116X150	FD/MD/FS/MS	1.5	SD006301100AR0R4----K01
630	1.1	2.5	80	3.85	12.0	442.1	70	85X275	FD/MD/FS/MS	1.6	SD006301100AR0S9----K01
650	1.3	2.7	80	4.80	14.4	393.3	60	85 X210	FD/MD/FS/MS	1.2	SD006501100AR0SK----K01
675	1.2	1.8	80	4.13	12.0	473.7	70	85X295	FD/MD/FS/MS	1.8	SD006751100AR0SA----K01
720	1.1	2.1	80	4.40	13.0	505.3	60	100X225	FD/MD/FS/MS	2.2	SD007201100AR0X7----K01
765	1.0	2.0	60	4.68	14.0	536.9	60	116X185	FD/MD/FS/MS	2.1	SD007651100AR0R6----K01
800	0.7	2.6	80	3.00	9.00	484.0	40	116 X145	FD/MD/FS/MS	1.3	SD008001100AR0RD----K01
825	0.9	1.9	80	5.06	15.0	579.0	70	100X255	FD/MD/FS/MS	2.5	SD008251100AR0X8----K01
830	0.8	2.3	80	4.80	14.4	502.2	60	85 X252	FD/MD/FS/MS	1.0	SD008301100AR0SL----K01
920	1.0	1.3	80	5.61	17.0	645.7	70	100X275	FD/MD/FS/MS	2.8	SD009201100AR0X9----K01
950	0.6	1.6	80	5.72	17.0	666.7	70	116X225	FD/MD/FS/MS	2.6	SD009501100AR0R7----K01
990	0.5	2.1	80	6.40	19.2	599.0	60	100 X230	FD/MD/FS/MS	1.6	SD009901100AR0XA----K01
1100	0.8	2.1	80	4.50	13.5	665.5	40	116 X180	FD/MD/FS/MS	1.9	SD011001100AR0RG----K01
1170	1	1.4	100	7.15	21.0	821.1	70	116X255	FD/MD/FS/MS	2.8	SD011701100AR0R8----K01
1245	0.65	1.7	120	13.2	39.6	753.2	60	116 X220	FD/MD/FS/MS	2.1	SD012451100AR0RI----K01
1260	1.2	1.3	100	7.70	23.0	884.3	70	116X275	FD/MD/FS/MS	3.1	SD012601100AR0R9----K01
1660	0.63	1.3	120	16.8	50.4	1004.3	75	116 X290	FD/MD/FS/MS	2.5	SD016601100AR0RL----K01
1750	1	1.4	120	9.00	27.0	1058.8	70	116 X280	FD/MD/FS/MS	3.2	SD017501100AR0RK----K01
2200	1.1	1.1	120	9.20	27.6	1331.0	70	116 X340	FD/MD/FS/MS	3.2	SD022001100AR0RM----K01
2300	0.6	1.1	120	24.8	74.4	1391.5	40	136 X295	FD/MD/FS/MS	3.5	SD023001100AR0I5----K01
3060	1	0.9	120	12.6	37.8	1851.3	70	136 X345	FD/MD/FS/MS	4.5	SD030601100AR0I6----K01
3170	1	0.9	120	13.2	39.6	1917.9	85	136 X 345	FD/MD/FS/MS	5.3	SD031701100AR0I6----K01

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Standard Capacitor Values

U_N= 1200V		Ur=250V		Us=1800V		U_{T-T}=1800VDC		U_{T-C}=4000 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
160	1.6	7.3	40	2.50	7.50	104.1	40	85 X78	FD/MD/FS/MS	0.5	SD001601200AR0Y8----K01
210	2.1	5.7	80	4.90	14.7	151.3	30	85 X100	FD/MD/FS/MS	0.4	SD002101200AR0SS----K01
210	2.1	6.0	40	2.50	7.50	169.4	30	85 X95	FD/MD/FS/MS	0.6	SD002101200AR0YA----K01
220	2.4	5.4	40	2.31	6.90	133.3	40	85X105	FD/MD/FS/MS	0.65	SD002201200AR0S1----K01
280	2.9	4.7	40	2.40	7.20	229.9	35	85 X120	FD/MD/FS/MS	0.9	SD002801200AR0SC----K01
300	3.1	4.6	40	2.86	8.60	164.9	40	85X125	FD/MD/FS/MS	0.75	SD003001200AR0S2----K01
320	3.2	4.4	40	2.40	7.20	254.1	40	85 X130	FD/MD/FS/MS	0.7	SD003201200AR0SD----K01
350	1.8	4.6	40	3.41	10.0	196.5	40	100X105	FD/MD/FS/MS	0.84	SD003501200AR0X1----K01
350	3.6	4.1	40	3.58	11.0	207	40	85X140	FD/MD/FS/MS	0.71	SD003501200AR0S3----K01
350	0.9	3.9	120	7.20	21.6	226.9	40	85 X146	FD/MD/FS/MS	0.6	SD003501200AR0SF----K01
380	1.0	3.8	60	3.85	12.0	221.1	40	85X150	FD/MD/FS/MS	0.9	SD003801200AR0S4----K01
380	1.2	3.8	80	5.00	15.0	272.3	40	85 X150	FD/MD/FS/MS	0.8	SD003801200AR0S4----K01
400	1.1	3.6	60	4.13	12.0	245.6	60	85X160	FD/MD/FS/MS	0.96	SD004001200AR0S5----K01
430	0.6	3.7	60	4.62	14.0	266.7	40	116X105	FD/MD/FS/MS	1.1	SD004301200AR0R1----K01
440	2.2	3.8	40	4.40	13.0	245.6	40	100X125	FD/MD/FS/MS	1	SD004401200AR0X2----K01
440	0.6	3.7	80	8.80	26.4	272.3	40	116 X105	FD/MD/FS/MS	1	SD004401200AR0R1----K01
480	2.3	3.4	60	2.34	7.00	270.2	60	85X185	FD/MD/FS/MS	1.2	SD004801200AR0S6----K01
480	1.4	3.1	40	2.60	7.80	360	60	85 X181	FD/MD/FS/MS	1.3	SD004801200AR0SI----K01
500	0.8	3.2	60	5.06	15.0	294.8	40	100X140	FD/MD/FS/MS	1.3	SD005001200AR0X3----K01
540	0.9	3.1	60	5.61	17.0	322.8	40	100X150	FD/MD/FS/MS	1.4	SD005401200AR0X4----K01
540	1.0	3.1	80	6.20	18.6	350.9	45	100 X155	FD/MD/FS/MS	1.2	SD005401200AR0X5----K01
550	0.5	2.3	60	5.72	17.0	329.8	40	116X125	FD/MD/FS/MS	1.1	SD005501200AR0R2----K01
600	1.5	2.7	80	4.80	14.4	393.3	60	85 X210	FD/MD/FS/MS	1.2	SD006001200AR0SR----K01
620	1.8	2.7	60	3.63	11.0	417.6	60	85X225	FD/MD/FS/MS	1.65	SD006201200AR0S7----K01
630	0.6	2.6	80	3.00	9.00	484	40	116 X145	FD/MD/FS/MS	1.3	SD006301200AR0RD----K01
680	0.5	2.6	60	7.15	21.0	410.6	60	116X140	FD/MD/FS/MS	1.4	SD006801200AR0R3----K01
700	1.1	2.3	60	3.41	10.0	393	60	100X185	FD/MD/FS/MS	1.2	SD007001200AR0X6----K01
720	0.8	2.5	80	3.85	12.0	442.1	70	85X275	FD/MD/FS/MS	1.6	SD007201200AR0S9----K01
720	0.9	2.3	80	4.80	14.4	502.2	60	85 X255	FD/MD/FS/MS	1	SD007201200AR0S8----K01
760	0.6	2.0	60	7.70	23.0	442.1	40	116X150	FD/MD/FS/MS	1.5	SD007601200AR0R4----K01
810	0.4	2.1	80	4.50	13.5	665.5	40	116 X180	FD/MD/FS/MS	1.9	SD008101200AR0RG----K01
840	1.2	1.8	80	4.13	12.0	473.7	70	85X295	FD/MD/FS/MS	1.8	SD008401200ARS10----K01
900	0.6	2.1	80	4.40	13.0	505.3	60	100X225	FD/MD/FS/MS	2.2	SD009001200AR0X7----K01
900	0.7	2.1	80	6.40	19.2	599	60	100 X230	FD/MD/FS/MS	1.6	SD009001200AR0XA----K01
940	0.8	2.0	60	4.68	14.0	536.9	60	116X185	FD/MD/FS/MS	2.1	SD009401200AR0R6----K01
1020	0.8	1.9	80	5.06	15.0	579	70	100X255	FD/MD/FS/MS	2.5	SD010201200AR0X8----K01
1100	0.7	1.3	80	5.61	17.0	645.7	70	100X275	FD/MD/FS/MS	2.8	SD011001200AR0X9----K01
1110	0.5	1.7	120	13.2	39.6	753.2	60	116 X220	FD/MD/FS/MS	2.1	SD011101200AR0RI----K01
1200	0.5	1.6	80	5.72	17.0	666.7	70	116X225	FD/MD/FS/MS	2.6	SD012001200AR0R7----K01
1380	0.6	1.4	100	7.15	21.0	821.1	70	116X255	FD/MD/FS/MS	2.8	SD013801200AR0R8----K01
1500	0.6	1.3	100	7.70	23.0	884.3	70	116X275	FD/MD/FS/MS	3.1	SD015001200AR0R9----K01
1500	0.6	1.4	120	9.00	27.0	1058.8	70	116 X280	FD/MD/FS/MS	3.2	SD015001200AR0RK----K01
1540	0.6	1.3	120	16.8	50.4	1004.3	75	116 X290	FD/MD/FS/MS	2.5	SD015401200AR0RL----K01
1950	0.8	1.1	120	9.2	27.6	1331	70	116 X340	FD/MD/FS/MS	3.2	SD019501200AR0RM----K01
2200	0.4	1.1	120	24.8	74.4	1391.5	40	136 X295	FD/MD/FS/MS	3.5	SD022001200AR0I5----K01
2640	0.3	0.9	120	12.6	37.8	1851.3	70	136 X345	FD/MD/FS/MS	4.5	SD026401200AR0I6----K01
2700	0.3	0.9	120	13.2	39.6	1917.9	85	136 X 345	FD/MD/FS/MS	5.3	SD027001200AR0I6----K01

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Standard Capacitor Values

U_N= 1300V		Ur=300V		Us=1950V		U_{T-T}=1950VDC		U_{T-C}=4320 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
145	2.3	6.7	40	2.00	6.00	122.5	40	85X85	FD/MD/FS/MS	0.5	SD001451300AR0Y9----K01
160	3.6	5.4	40	2.28	6.80	135.2	40	85X105	FD/MD/FS/MS	0.65	SD001601300AR0S1----K01
200	2.0	4.6	40	2.86	8.60	169.0	40	85X125	FD/MD/FS/MS	0.75	SD002001300AR0S2----K01
215	0.8	5.2	40	2.00	6.00	181.7	60	85X110	FD/MD/FS/MS	0.7	SD002151300AR0SB----K01
235	0.9	4.6	40	3.38	10.0	198.6	40	100X105	FD/MD/FS/MS	0.84	SD002351300AR0X1----K01
250	0.6	4.2	80	4.00	12.0	211.3	40	85X136	FD/MD/FS/MS	0.8	SD002501300AR0SE----K01
250	1.8	4.1	40	3.58	11.0	211.3	40	85X140	FD/MD/FS/MS	0.71	SD002501300AR0S3----K01
270	1.5	4.2	40	1.80	5.40	228.2	40	85X136	FD/MD/FS/MS	0.8	SD002701300AR0SE----K01
270	2	3.8	60	3.90	12.0	228.2	40	85X150	FD/MD/FS/MS	0.9	SD002701300AR0S4----K01
300	1.2	4.2	40	2.00	6.00	253.5	40	85X136	FD/MD/FS/MS	0.8	SD003001300AR0SE----K01
300	2.0	3.6	60	4.23	13.0	253.5	60	85X160	FD/MD/FS/MS	0.96	SD003001300AR0S5----K01
300	1.0	3.8	40	4.36	13.0	253.5	40	100X125	FD/MD/FS/MS	1.0	SD003001300AR0X2----K01
315	1.0	3.7	60	4.55	14.0	266.2	40	116X105	FD/MD/FS/MS	1.1	SD003151300AR0R1----K01
325	2.2	3.4	60	2.34	7.0	274.6	60	85X185	FD/MD/FS/MS	0.9	SD003251300AR0S6----K01
350	1.2	3.2	60	5.07	15.0	295.8	40	100X140	FD/MD/FS/MS	1.2	SD003501300AR0X3----K01
360	1.7	3.2	80	3.90	11.7	304.2	50	85X176	FD/MD/FS/MS	1.1	SD003601300AR0SH----K01
380	1.2	3.1	60	5.53	17.0	321.1	40	100X150	FD/MD/FS/MS	1.3	SD003801300AR0X4----K01
390	1.1	3.1	80	3.60	10.8	329.6	60	85X181	FD/MD/FS/MS	1.2	SD003901300AR0SI----K01
395	1.2	2.3	60	5.72	17.0	333.8	40	116X125	FD/MD/FS/MS	1.4	SD003951300AR0R2----K01
395	1.5	2.3	60	2.86	8.60	333.8	60	85X225	FD/MD/FS/MS	1.1	SD003951300AR0S7----K01
430	1.1	2.8	80	3.80	11.4	363.4	55	85X200	FD/MD/FS/MS	1.2	SD004301300AR0SJ----K01
470	1.7	2.6	60	3.38	10.0	397.2	60	100X185	FD/MD/FS/MS	1.4	SD004701300AR0X6----K01
470	1.3	2.7	60	6.83	20.0	397.2	60	116X140	FD/MD/FS/MS	1.65	SD004701300AR0R3----K01
495	0.9	2.5	60	7.15	21.0	418.3	40	116X150	FD/MD/FS/MS	1.6	SD004951300AR0R4----K01
495	1.5	2.3	80	3.58	11.0	418.3	70	85X255	FD/MD/FS/MS	1.2	SD004951300AR0S8----K01
500	0.7	2.7	80	6.60	19.8	422.5	40	116X140	FD/MD/FS/MS	1.6	SD005001300AR0R3----K01
540	1.6	2.0	80	3.90	12.0	456.3	50	85X275	FD/MD/FS/MS	1.5	SD005401300AR0S9----K01
560	1.3	2.3	80	4.00	12.0	473.2	60	85X252	FD/MD/FS/MS	1.6	SD005601300AR0SL----K01
585	1.8	1.8	80	4.23	13.0	494.3	70	85X295	FD/MD/FS/MS	1.9	SD005851300AR0SA----K01
600	1.1	2.1	60	4.36	13.0	507.0	60	100X225	FD/MD/FS/MS	2.2	SD006001300AR0X7----K01
615	0.8	2.0	80	4.45	13.0	519.7	60	116X185	FD/MD/FS/MS	2.1	SD006151300AR0R6----K01
645	0.7	2.3	80	7.10	21.3	545.0	40	116X165	FD/MD/FS/MS	1.9	SD006451300AR0RF----K01
700	1.2	1.9	80	5.07	15.0	591.5	70	100X255	FD/MD/FS/MS	2.5	SD007001300AR0X8----K01
765	1.1	1.3	90	5.53	17.0	646.4	70	100X275	FD/MD/FS/MS	2.8	SD007651300AR0X9----K01
785	0.9	1.6	80	5.69	17.0	663.3	60	116X225	FD/MD/FS/MS	2.6	SD007851300AR0R7----K01
945	1	1.4	100	6.83	20.0	798.5	70	116X255	FD/MD/FS/MS	2.8	SD009451300AR0R8----K01
1000	1.2	1.3	100	7.15	21.0	845.0	70	116X275	FD/MD/FS/MS	3.1	SD010001300AR0R9----K01
1100	0.9	1.3	120	14.6	43.8	929.5	75	116X290	FD/MD/FS/MS	3.3	SD011001300AR0RL----K01
1460	1.2	1.1	120	7.20	21.6	1233.7	85	116X340	FD/MD/FS/MS	3.9	SD014601300AR0RM----K01
1560	0.7	1.1	120	20.7	62.1	1318.2	70	136X295	FD/MD/FS/MS	4.5	SD015601300AR0I5----K01
1600	0.9	1.1	80	10.0	30.0	1352.0	70	136X295	FD/MD/FS/MS	4.5	SD016001300AR0I5----K01
2070	0.9	0.9	120	10.4	31.2	1749.2	85	136X345	FD/MD/FS/MS	5.4	SD020701300AR0I6----K01

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Standard Capacitor Values

U_N= 1500V		Ur=300V		Us=2250V		U_{T-T}=2250VDC		U_{T-C}=4800 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
85	1.5	5.4	40	1.43	4.30	95.6	40	85X105	FD/MD/FS/MS	0.65	SD000851500AR0S1----K01
120	2.0	4.6	40	1.95	5.90	135.0	40	85X125	FD/MD/FS/MS	0.75	SD001201500AR0S2----K01
125	2.1	4.1	40	2.10	6.30	140.6	40	85X140	FD/MD/FS/MS	0.71	SD001251500AR0S3----K01
130	2.0	4.6	40	2.18	6.50	146.3	40	100X105	FD/MD/FS/MS	0.84	SD001301500AR0X1----K01
150	1.0	3.8	60	2.40	7.20	168.8	40	85X150	FD/MD/FS/MS	0.9	SD001501500AR0S4----K01
160	1.1	3.6	60	2.63	7.90	180.0	60	85X160	FD/MD/FS/MS	0.96	SD001601500AR0S5----K01
170	2.4	3.8	40	2.85	8.60	191.3	40	100X125	FD/MD/FS/MS	1.0	SD001701500AR0X2----K01
170	1.0	3.7	60	2.85	8.60	191.3	40	116X105	FD/MD/FS/MS	1.1	SD001701500AR0R1----K01
180	1.0	4.6	80	3.40	10.2	202.5	30	85X125	FD/MD/FS/MS	0.8	SD001801500AR0S2----K01
200	1.2	3.4	60	3.30	9.90	225.0	40	100X140	FD/MD/FS/MS	1.2	SD002001500AR0X3----K01
210	2.8	4.2	40	1.80	5.40	236.3	55	85X136	FD/MD/FS/MS	0.8	SD002101500AR0SE----K01
220	1.2	3.2	60	3.60	11.0	247.5	40	100X150	FD/MD/FS/MS	1.3	SD002201500AR0X4----K01
230	1.6	3.7	80	3.20	9.60	258.8	40	85X155	FD/MD/FS/MS	1.0	SD002301500AR0SG----K01
240	1.2	3.1	60	3.90	12.0	270.0	40	116X125	FD/MD/FS/MS	1.4	SD002401500AR0R2----K01
250	1.5	2.3	60	2.06	6.20	281.3	60	85X225	FD/MD/FS/MS	1.1	SD002501500AR0S7----K01
250	1.3	2.3	60	2.10	6.30	281.3	60	85X255	FD/MD/FS/MS	1.53	SD002501500AR0S8----K01
260	1.7	2.6	60	2.18	6.50	292.5	60	100X185	FD/MD/FS/MS	1.4	SD002601500AR0X6----K01
285	1.3	2.6	60	4.73	14.0	320.6	40	116X150	FD/MD/FS/MS	1.6	SD002851500AR0R4----K01
290	1.9	2.0	60	2.40	7.20	326.3	70	85X275	FD/MD/FS/MS	1.5	SD002901500AR0S9----K01
315	1.2	1.8	80	2.63	7.90	354.4	70	85X295	FD/MD/FS/MS	1.9	SD003151500AR0SA----K01
350	1.6	2.6	80	3.20	9.60	393.8	70	85X223	FD/MD/FS/MS	1.4	SD003501500AR0SO----K01
350	1.9	2.1	60	2.85	8.60	393.8	70	100X225	FD/MD/FS/MS	2.2	SD003501500AR0X7----K01
360	1.0	2.0	80	3.00	9.00	405.0	60	116X185	FD/MD/FS/MS	2.1	SD003601500AR0R6----K01
365	0.5	3.1	80	7.40	22.2	410.6	35	116X125	FD/MD/FS/MS	1.4	SD003651500AR0R2----K01
400	1.2	1.9	80	3.30	9.90	450.0	70	100X255	FD/MD/FS/MS	2.5	SD004001500AR0X8----K01
405	0.6	2.8	80	7.00	21.0	455.6	40	116X135	FD/MD/FS/MS	1.5	SD004051500AR0RC----K01
430	1.2	1.3	80	3.60	11.0	483.8	70	100X275	FD/MD/FS/MS	2.8	SD004301500AR0X9----K01
560	1.0	1.6	100	4.69	14.0	630.0	70	116X255	FD/MD/FS/MS	2.8	SD005601500AR0R8----K01
575	0.6	2.3	80	4.60	13.8	646.9	40	136X140	FD/MD/FS/MS	2.2	SD005751500AR0I2----K01
630	1.2	1.3	100	5.25	16.0	708.8	70	116X275	FD/MD/FS/MS	3.1	SD006301500AR0R9----K01
680	0.5	1.7	120	13.0	39.0	765.0	50	136X195	FD/MD/FS/MS	3.1	SD006801500AR0I3----K01
810	0.65	1.5	120	6.50	19.5	911.3	65	116X250	FD/MD/FS/MS	2.9	SD008101500AR0RJ----K01
1095	1.0	1.1	120	9.30	27.9	1231.9	85	116X335	FD/MD/FS/MS	3.8	SD010951500AR0RN----K01
1545	0.8	0.9	120	13.2	39.6	1738.1	85	136X345	FD/MD/FS/MS	5.3	SD015451500AR0I6----K01

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Standard Capacitor Values

U_N= 1800V		Ur=400V		Us=2700V		U_{T-T}=2700VDC		U_{T-C}=5520 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
70	1.7	5.4	40	1.35	4.10	113.4	40	85X105	FD/MD/FS/MS	0.65	SD000701800AR0S1----K01
90	1.6	4.6	40	1.80	5.40	145.8	40	85X125	FD/MD/FS/MS	0.75	SD000901800AR0S2----K01
100	2.1	4.1	40	2.07	6.20	162.0	40	85X140	FD/MD/FS/MS	0.71	SD001001800AR0S3----K01
100	1.8	4.6	40	2.07	6.20	162.0	40	100X105	FD/MD/FS/MS	0.84	SD001001800AR0X1----K01
110	2.2	3.8	60	2.16	6.50	178.2	40	85X150	FD/MD/FS/MS	0.9	SD001101800AR0S4----K01
120	1.1	5.2	40	1.50	5.40	194.4	60	85X110	FD/MD/FS/MS	0.7	SD001201800AR0SB----K01
130	1.1	3.6	60	2.52	7.60	210.6	60	85X160	FD/MD/FS/MS	0.96	SD001301800AR0S5----K01
135	2.4	3.8	40	2.70	8.10	218.7	40	100X125	FD/MD/FS/MS	1.0	SD001351800AR0X2----K01
135	1.0	3.7	60	2.70	8.10	218.7	40	116X105	FD/MD/FS/MS	1.1	SD001351800AR0R1----K01
160	1.2	3.4	60	3.15	9.50	259.2	40	100X140	FD/MD/FS/MS	1.2	SD001601800AR0X3----K01
170	1.2	3.2	60	3.42	10.0	275.4	40	100X150	FD/MD/FS/MS	1.3	SD001701800AR0X4----K01
180	1.2	3.1	60	3.60	11.0	291.6	40	116X125	FD/MD/FS/MS	1.4	SD001801800AR0R2----K01
200	1.5	2.3	60	4.05	12.0	324.0	60	85X225	FD/MD/FS/MS	1.1	SD002001800AR0S7----K01
210	1.0	2.3	80	4.14	12.0	340.2	60	85X255	FD/MD/FS/MS	1.2	SD002101800AR0S8----K01
210	1.7	2.6	60	4.14	12.0	340.2	60	100X185	FD/MD/FS/MS	1.4	SD002101800AR0X6----K01
220	1.3	2.7	60	4.32	13.0	356.4	40	116X140	FD/MD/FS/MS	1.64	SD002201800AR0R3----K01
225	1.9	2.0	60	4.50	14.0	364.5	70	85X275	FD/MD/FS/MS	1.5	SD002251800AR0S9----K01
250	1.3	2.5	60	4.95	15.0	405.0	50	116X150	FD/MD/FS/MS	1.6	SD002501800AR0R4----K01
270	2.2	1.8	60	2.70	8.10	437.4	70	85X295	FD/MD/FS/MS	1.9	SD002701800AR0SA----K01
270	1.1	2.1	80	2.70	8.10	437.4	60	100X225	FD/MD/FS/MS	2.2	SD002701800AR0X7----K01
270	0.6	2.0	100	2.70	8.10	437.4	60	116X185	FD/MD/FS/MS	2.1	SD002701800AR0R6----K01
315	0.8	1.9	100	3.15	9.50	510.3	70	100X255	FD/MD/FS/MS	2.5	SD003151800AR0X8----K01
350	0.8	1.3	100	3.42	10.0	567.0	70	100X275	FD/MD/FS/MS	2.8	SD003501800AR0X9----K01
360	1.0	1.6	100	3.60	11.0	583.2	70	116X255	FD/MD/FS/MS	2.8	SD003601800AR0R8----K01
390	2.2	2.1	40	2.60	7.80	631.8	50	116X180	FD/MD/FS/MS	2.2	SD003901800AR0RG----K01
430	1.2	1.3	100	4.28	13.0	696.6	70	116X275	FD/MD/FS/MS	3.1	SD004301800AR0R9----K01
630	0.9	1.4	90	5.40	17.4	1020.6	70	116X280	FD/MD/FS/MS	3.2	SD006301800AR0RK----K01
890	0.75	1.1	90	7.60	24.0	1441.8	75	136X295	FD/MD/FS/MS	4.5	SD008901800AR0I5----K01
1060	0.9	0.9	120	11.3	36.0	1717.2	70	136X345	FD/MD/FS/MS	5.3	SD010601800AR0I6----K01

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Standard Capacitor Values

U_N= 2000V		Ur=500V		Us=3000V		U_{T-T}=3000VDC		U_{T-C}=6000 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
60	1.5	5.4	40	1.30	3.90	120.0	40	85x105	FD/MD/FS/MS	0.65	SD000602000AR0S1----K01
70	2.0	4.6	40	1.60	4.80	140.0	40	85x125	FD/MD/FS/MS	0.75	SD000702000AR0S2----K01
80	2.1	4.1	40	1.80	5.40	160.0	40	85x140	FD/MD/FS/MS	0.71	SD000802000AR0S3----K01
85	2	4.6	40	1.90	5.70	170.0	40	100x105	FD/MD/FS/MS	0.84	SD000852000AR0X1----K01
90	2.9	5.2	40	1.30	3.90	180.0	60	85X110	FD/MD/FS/MS	0.7	SD000902000AR0SB----K01
90	1.0	3.8	60	2.00	6.00	180.0	40	85x150	FD/MD/FS/MS	0.9	SD000902000AR0S4----K01
100	1.1	3.6	60	2.20	6.60	200.0	60	85x160	FD/MD/FS/MS	0.96	SD001002000AR0S5----K01
105	2.7	4.7	40	1.40	4.20	210.0	35	85X120	FD/MD/FS/MS	0.7	SD001052000AR0SC----K01
110	2.4	3.8	40	2.40	7.20	220.0	40	100x125	FD/MD/FS/MS	1.0	SD001102000AR0X2----K01
115	1.0	3.7	60	2.50	7.50	230.0	40	116x105	FD/MD/FS/MS	1.1	SD001152000AR0R1----K01
120	1.3	3.8	80	2.40	7.20	240.0	40	85X150	FD/MD/FS/MS	0.9	SD001202000AR0S4----K01
120	1.3	3.1	60	1.30	3.90	240.0	60	85x185	FD/MD/FS/MS	0.9	SD001202000AR0S6----K01
125	1.2	3.4	60	2.80	8.40	250.0	40	100x140	FD/MD/FS/MS	1.2	SD001252000AR0X3----K01
135	1.2	3.1	60	3.00	9.00	270.0	40	116x125	FD/MD/FS/MS	1.4	SD001352000AR0R2----K01
140	1.2	3.2	60	3.10	9.30	280.0	60	100x150	FD/MD/FS/MS	1.3	SD001402000AR0X4----K01
150	1.5	2.3	60	3.20	9.60	300.0	60	85x225	FD/MD/FS/MS	1.1	SD001502000AR0S7----K01
155	1.3	2.7	60	3.50	11.0	310.0	40	116x140	FD/MD/FS/MS	1.65	SD001552000AR0R3----K01
160	1.0	3.1	80	3.20	9.60	320.0	45	100X155	FD/MD/FS/MS	1.3	SD001602000AR0X5----K01
170	0.7	3.5	80	5.00	15.0	340.0	35	116X110	FD/MD/FS/MS	1.4	SD001702000AR0RA----K01
170	1.7	2.6	60	1.90	5.70	340.0	60	100x185	FD/MD/FS/MS	1.4	SD001702000AR0X6----K01
180	1.9	2	60	2.00	6.00	360.0	40	85x275	FD/MD/FS/MS	1.5	SD001802000AR0S9----K01
180	1.3	2.5	60	4.00	12.0	360.0	60	116x150	FD/MD/FS/MS	1.6	SD001802000AR0R4----K01
195	0.75	3.1	80	4.80	14.4	390.0	35	116X125	FD/MD/FS/MS	1.4	SD001952000AR0R2----K01
200	2.2	1.8	60	2.25	6.80	400.0	70	85x295	FD/MD/FS/MS	1.9	SD002002000AR0SA----K01
210	2.1	2.5	80	2.40	7.20	420.0	60	85X232	FD/MD/FS/MS	1.5	SD002102000AR0SN----K01
215	1.1	2.1	80	2.40	7.20	430.0	70	100x225	FD/MD/FS/MS	2.2	SD002152000AR0X7----K01
225	1.0	2.0	80	2.50	7.50	450.0	60	116x185	FD/MD/FS/MS	2.1	SD002252000AR0R6----K01
250	1.2	1.9	80	2.80	8.40	500.0	70	100x255	FD/MD/FS/MS	2.5	SD002502000AR0X8----K01
270	1.2	1.6	80	3.00	9.00	540.0	70	116x225	FD/MD/FS/MS	2.6	SD002702000AR0R7----K01
275	0.65	2.5	80	6.60	19.8	550.0	40	136X129	FD/MD/FS/MS	2.0	SD002752000AR0I1----K01
280	1.2	1.3	80	3.10	9.30	560.0	70	100x275	FD/MD/FS/MS	2.8	SD002802000AR0X9----K01
310	2.1	2.1	80	2.40	7.20	620.0	50	116X180	FD/MD/FS/MS	2.1	SD003102000AR0RG----K01
315	1.0	1.4	100	3.50	11.0	630.0	70	116x255	FD/MD/FS/MS	2.8	SD003152000AR0R8----K01
360	1.2	1.3	100	4.00	12.0	720.0	70	116x275	FD/MD/FS/MS	3.1	SD003602000AR0R9----K01
640	0.9	1.1	120	12.9	38.7	1280.0	70	136X295	FD/MD/FS/MS	4.5	SD006402000AR0I5----K01
800	0.9	0.9	120	9.60	28.8	1600.0	70	136X345	FD/MD/FS/MS	5.3	SD008002000AR0I6----K01
825	0.9	0.9	120	9.10	27.3	1650.0	85	136X345	FD/MD/FS/MS	5.4	SD008252000AR0I6----K01
880	1.3	0.9	120	6.60	19.8	1760.0	85	136X345	FD/MD/FS/MS	5.4	SD008802000AR0I6----K01

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Standard Capacitor Values

U_N= 2200V		Ur=600V		Us=3300V		U_{T-T}=3300VDC		U_{T-C}=6480 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
45	1.7	5.4	40	1.10	3.30	108.9	40	85x105	FD/MD/FS/MS	0.65	SD000452200AR0S1----K01
60	1.5	4.6	40	1.43	4.29	145.2	40	85x125	FD/MD/FS/MS	0.75	SD000602200AR0S2----K01
65	2.1	4.1	40	1.65	4.95	157.3	40	85x140	FD/MD/FS/MS	0.71	SD000652200AR0S3----K01
65	2.0	4.6	40	1.65	4.95	157.3	40	100x105	FD/MD/FS/MS	0.84	SD000652200AR0X1----K01
75	2.0	3.8	60	1.87	5.61	181.5	40	85x150	FD/MD/FS/MS	0.9	SD000752200AR0S4----K01
85	2.6	3.6	60	2.09	6.27	205.7	60	85x160	FD/MD/FS/MS	0.96	SD000852200AR0S5----K01
90	2.8	3.1	40	2.20	6.60	217.8	40	85x185	FD/MD/FS/MS	0.9	SD000902200AR0S6----K01
90	1.6	3.7	60	2.20	6.60	217.8	40	116x105	FD/MD/FS/MS	1.1	SD000902200AR0R1----K01
90	2.5	3.8	60	2.20	6.60	217.8	40	100x125	FD/MD/FS/MS	1.0	SD000902200AR0X2----K01
105	1.4	3.4	60	2.53	7.59	254.1	40	100x140	FD/MD/FS/MS	1.2	SD001052200AR0X3----K01
110	1.4	3.2	60	2.75	8.25	266.2	40	100x150	FD/MD/FS/MS	1.3	SD001102200AR0X4----K01
115	1.5	2.3	60	1.43	4.29	278.3	60	85x225	FD/MD/FS/MS	1.1	SD001152200AR0S7----K01
115	1.2	3.1	60	2.86	8.58	278.3	40	116x125	FD/MD/FS/MS	1.4	SD001152200AR0R2----K01
135	1.7	2.3	60	1.65	4.95	326.7	60	85x255	FD/MD/FS/MS	1.2	SD001352200AR0S8----K01
135	1.7	2.6	60	1.65	4.95	326.7	60	100x185	FD/MD/FS/MS	1.4	SD001352200AR0X6----K01
135	1.3	2.7	60	3.30	9.90	326.7	40	116x140	FD/MD/FS/MS	1.65	SD001352200AR0R3----K01
145	1.6	2	80	1.76	5.28	350.9	70	85x275	FD/MD/FS/MS	1.5	SD001452200AR0S9----K01
150	0.9	2.5	60	3.74	11.22	363.0	50	116x150	FD/MD/FS/MS	1.6	SD001502200AR0R4----K01
170	1.4	2.5	80	2.30	6.90	411.4	60	85X225	FD/MD/FS/MS	1.4	SD001702200AR0S7----K01
170	1.2	1.8	80	2.09	6.27	411.4	70	85x295	FD/MD/FS/MS	1.9	SD001702200AR0SA----K01
180	1.1	2.1	80	2.20	6.60	435.6	60	100x225	FD/MD/FS/MS	2.2	SD001802200AR0X7----K01
180	1.0	2.0	80	2.20	6.60	435.6	60	116x185	FD/MD/FS/MS	2.1	SD001802200AR0R6----K01
205	1.4	1.9	80	2.53	7.59	496.1	70	100x255	FD/MD/FS/MS	2.5	SD002052200AR0X8----K01
225	1.2	1.3	80	2.75	8.25	544.5	70	100x275	FD/MD/FS/MS	2.8	SD002252200AR0X9----K01
235	0.9	1.6	80	2.86	8.58	568.7	60	116x225	FD/MD/FS/MS	2.6	SD002352200AR0R7----K01
270	0.9	1.4	100	3.30	9.90	653.4	70	116x255	FD/MD/FS/MS	2.8	SD002702200AR0R8----K01
280	1.2	1.3	100	3.50	10.5	677.6	70	116x275	FD/MD/FS/MS	3.1	SD002802200AR0R9----K01
390	0.6	1.4	120	9.00	27.0	943.8	60	136X230	FD/MD/FS/MS	3.6	SD003902200AR0I4----K01
660	0.7	0.9	120	8.60	25.8	1597.2	70	136X345	FD/MD/FS/MS	5.3	SD006602200AR0I6----K01

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Standard Capacitor Values

U_N= 2400V		Ur=600V		Us=3600V		U_{T-T}=3600VDC		U_{T-C}=6960 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
45	1.7	5.4	40	1.20	3.60	129.6	40	85X105	FD/MD/FS/MS	0.65	SD000452400AR0S1----K01
55	1.4	4.6	40	1.44	4.32	158.4	40	85X125	FD/MD/FS/MS	0.75	SD000552400AR0S2----K01
60	1.0	4.6	40	1.56	4.68	172.8	40	100X105	FD/MD/FS/MS	0.84	SD000602400AR0X1----K01
65	2.1	4.1	40	1.68	5.04	187.2	40	85X140	FD/MD/FS/MS	0.71	SD000652400AR0S3----K01
70	1.1	3.8	60	1.80	5.40	201.6	40	85X150	FD/MD/FS/MS	0.9	SD000702400AR0S4----K01
75	1.0	3.6	60	1.92	5.76	216.0	60	85X160	FD/MD/FS/MS	0.96	SD000752400AR0S5----K01
75	1.3	3.8	40	2.04	6.12	216.0	40	100X125	FD/MD/FS/MS	1.0	SD000752400AR0X2----K01
80	1.0	3.7	60	2.16	6.48	230.4	40	116X105	FD/MD/FS/MS	1.1	SD000802400AR0R1----K01
90	1.2	3.4	60	2.40	7.20	259.2	40	100X140	FD/MD/FS/MS	1.2	SD000902400AR0X3----K01
95	1.2	3.2	60	2.52	7.56	273.6	40	100X150	FD/MD/FS/MS	1.3	SD000952400AR0X4----K01
100	1.2	3.1	60	2.64	7.92	288.0	40	116X125	FD/MD/FS/MS	1.4	SD001002400AR0R2----K01
100	1.2	3.1	60	1.32	3.96	288.0	60	85X185	FD/MD/FS/MS	0.9	SD001002400AR0S6----K01
110	1.3	2.7	80	6.00	18.0	316.8	60	85X210	FD/MD/FS/MS	1.3	SD001102400AR0SK----K01
110	1.5	2.3	60	1.44	4.32	316.8	60	85X225	FD/MD/FS/MS	1.1	SD001102400AR0S7----K01
120	2.0	2.3	60	1.56	4.68	345.6	60	85X255	FD/MD/FS/MS	1.2	SD0012024 00AR0S8----K01
120	1.7	2.6	60	1.56	4.68	345.6	60	100X185	FD/MD/FS/MS	1.4	SD001202400AR0X6----K01
125	1.0	2.7	60	3.36	10.08	360.0	40	116X140	FD/MD/FS/MS	1.65	SD001252400AR0R3----K01
125	1.9	2.0	80	1.68	5.04	360.0	70	85X275	FD/MD/FS/MS	1.5	SD001252400AR0S9----K01
130	1.4	2.5	80	6.60	19.8	374.4	60	85X232	FD/MD/FS/MS	1.5	SD001302400AR0SN----K01
135	1.0	2.5	60	3.60	10.8	388.8	50	116X150	FD/MD/FS/MS	1.6	SD001352400AR0R4----K01
145	2.1	1.8	80	1.92	5.76	417.6	70	85X295	FD/MD/FS/MS	1.9	SD001452400AR0SA----K01
155	1.1	2.1	80	2.04	6.12	446.4	60	100X225	FD/MD/FS/MS	2.2	SD001552400AR0X7----K01
155	1.0	2.0	80	2.04	6.12	446.4	60	116X185	FD/MD/FS/MS	2.1	SD001552400AR0R6----K01
180	1.2	1.9	80	2.40	7.20	518.4	70	100X255	FD/MD/FS/MS	2.5	SD001802400AR0X8----K01
190	1.2	1.3	80	2.52	7.56	547.2	70	100X275	FD/MD/FS/MS	2.8	SD001902400AR0X9----K01
200	0.9	1.6	90	2.64	7.92	576.0	60	116X225	FD/MD/FS/MS	2.6	SD002002400AR0R7----K01
235	1.0	1.4	100	3.12	9.36	676.8	70	116X255	FD/MD/FS/MS	2.8	SD002352400AR0R8----K01
250	0.9	1.3	100	3.36	10.08	720.0	70	116X275	FD/MD/FS/MS	3.1	SD002502400AR0R9----K01
390	0.9	1.1	120	20.8	62.4	1123.2	70	136X 295	FD/MD/FS/MS	4.5	SD003902400AR0I5----K01
500	0.8	0.9	120	15.0	45.0	1440.0	70	136X 345	FD/MD/FS/MS	5.3	SD005002400AR0I6----K01

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Standard Capacitor Values

U_N= 3000V		Ur=600V		Us=4500V		U_{T-T}=4500VDC		U_{T-C}=8400 V AC/2s			
C_N	Rs	Rth	Imax	Ipeak	Isurge	En	L	DXL	Terminal Style	Mass	Order code
(uF)	(mΩ)	(K/W)	(A)	(KA)	(KA)	(W*sec)	(nH)	(mm)		(Kg)	
36	1.4	5.4	40	1.70	5.10	162	40	85X105	FD/MD/FS/MS	0.65	SD000363000AR0S1----K01
44	1.6	4.6	40	1.60	4.80	198	40	85X125	FD/MD/FS/MS	0.75	SD000443000AR0S2----K01
52	1.1	4.6	40	2.50	7.50	234	40	100X105	FD/MD/FS/MS	0.84	SD000523000AR0X1----K01
58	2.2	4.1	40	1.80	5.40	261	40	85X140	FD/MD/FS/MS	0.71	SD000583000AR0S3----K01
60	2	3.8	60	1.80	5.40	270	40	85X150	FD/MD/FS/MS	0.9	SD000603000AR0S4----K01
60	2.2	3.6	60	1.92	5.80	270	60	85X160	FD/MD/FS/MS	0.96	SD000603000AR0S5----K01
70	1.3	3.8	40	2.60	7.80	315	40	100X125	FD/MD/FS/MS	1	SD000703000AR0X2----K01
74	0.8	3.7	60	3.60	10.80	333	40	116X105	FD/MD/FS/MS	1.1	SD000743000AR0R1----K01
80	1.3	3.4	60	2.60	7.80	360	40	100X140	FD/MD/FS/MS	1.2	SD000803000AR0X3----K01
90	1.5	3.2	60	2.60	7.80	405	40	100X150	FD/MD/FS/MS	1.3	SD000903000AR0X4----K01
94	0.8	3.1	60	3.50	10.5	423	40	116X125	FD/MD/FS/MS	1.4	SD000943000AR0R2----K01
95	0.9	2.7	80	3.70	10.8	428	60	85X210	FD/MD/FS/MS	1.3	SD000953000AR0SR----K01
95	0.9	2.3	60	3.70	10.8	428	60	85X225	FD/MD/FS/MS	1.1	SD000953000AR0S7----K01
100	1.3	2.3	60	1.15	3.45	450	60	85X255	FD/MD/FS/MS	1.2	SD001003000AR0S8----K01
110	2.2	2.6	60	2.50	7.50	495	60	100X185	FD/MD/FS/MS	1.4	SD001103000AR0X6----K01
110	1.05	2.7	60	3.50	10.5	495	40	116X140	FD/MD/FS/MS	1.7	SD001103000AR0R3----K01
120	1.3	2.0	80	2.50	7.50	540	70	85X275	FD/MD/FS/MS	1.5	SD001203000AR0S9----K01
100	1.1	2.5	80	3.40	10.2	450	60	85X230	FD/MD/FS/MS	1.5	SD001003000AR0ST----K01
110	1.2	2.5	60	3.20	9.60	495	50	116X150	FD/MD/FS/MS	1.6	SD001103000AR0R4----K01
130	1.3	1.8	80	1.75	5.25	858	70	85X295	FD/MD/FS/MS	1.9	SD001303000AR0SA----K01
135	1.2	2.1	80	2.40	7.20	608	60	100X225	FD/MD/FS/MS	2.2	SD001353000AR0X7----K01
150	1.6	2.0	80	3.40	10.2	675	60	116X185	FD/MD/FS/MS	2.1	SD001503000AR0R6----K01
160	0.6	1.9	80	3.70	11.1	720	70	100X255	FD/MD/FS/MS	2.5	SD001603000AR0X8----K01
180	1.4	1.3	80	3.80	11.4	810	70	100X275	FD/MD/FS/MS	2.8	SD001803000AR0X9----K01
220	0.8	1.6	90	3.90	11.7	990	60	116X225	FD/MD/FS/MS	2.6	SD002203000AR0R7----K01
225	0.9	1.4	100	3.50	10.5	1013	70	116X255	FD/MD/FS/MS	2.8	SD002253000AR0R8----K01
240	1.1	1.3	100	5.10	15.3	1080	70	116X275	FD/MD/FS/MS	3.1	SD002403000AR0R9----K01
380	0.5	1.1	120	10.0	30.0	1710	70	136X 295	FD/MD/FS/MS	4.5	SD003803000AR0I5----K01
450	0.6	0.9	120	9.50	28.5	2025	70	136X 345	FD/MD/FS/MS	5.3	SD004503000AR0I6----K01

Definitions of parameters

Rated capacitance C_R
Nominal value of the capacitance at 20 °C and measuring frequency of 100 Hz.

Rated DC voltage: U_N
Maximum operating peak voltage of either polarity but of a non- reversing type waveform, for which the capacitor has been designed, for continuous operation.

Working voltage: U_w
The maximum continuous voltage either DC or AC that can be applied to the capacitor without failure during its working life.

Ripple voltage: U_R
Peak- to- peak alternating component of the unidirectional voltage non-recurrent

Non-recurrent surge voltage: U_S
Peak voltage induced by a switching or any other disturbance of the system which is allowed for a limited number of times and for durations shorter than the basic period.

Insulation voltage: U_i
r.m.s. value of the sine wave voltage designed for the insulation between terminals of capacitors to case or earth.

Maximum peak current: I_P
Maximum repetitive peak current that can occur during continuous operation.

Maximum current: I_{max}
Maximum r.m.s. current for continuous operation.

Maximum surge current: I_S
Peak non - repetitive current induced by switching or any other disturbance of the system which is allowed for a limited number of times, for durations shorter than the basic period.

Highest operating temperature: Θ_{max}
Temperature of the hottest point on the case of the capacitor when in thermal equilibrium

Lowest operating temperature: Θ_{min}
Lowest temperature of the dielectric at which the capacitor may be energize.

Container temperature rise $\Delta\Theta_{case}$
Difference between the temperature of the hottest point of the container and the temperature of the cooling air

Cooling- air temperature: Θ_{amb}
Temperature of the cooling air measured at the hottest position of the capacitor, under steady state conditions, midway between two units

NOTE: if only one unit is involved, it is the temperature measured at a point approximately 0.1 m away from the capacitor container and at two-thirds of the heights from its base.

Maximum operating temperature: Θ_{max}
Highest temperature of the case at which the capacitor may be operated.

Steady-state conditions
Thermal equilibrium attained by the capacitor at constant output and at constant cooling-air temperature.

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Definitions of parameters

Tangent of the loss angle of a capacitor: tan δ
Ratio between the equivalent series resistance and the capacitive reactance of a capacitor at a specified sinusoidal alternating voltage, frequency and temperature

$\tan \delta = R_{esr} \times \omega C = \tan \delta_0 + Rs \times \omega C$

$\tan \delta_0$= dielectric loss factor (0.0002)

Equivalent series resistance of a capacitor: ESR
Effective series resistance (ESR) which if connected in series with an ideal capacitor of capacitor of capacitance value equal to that of the capacitor in question, would have a power loss equal to active power dissipated in that capacitor under specified operating conditions.

Maximum power loss: P_{max}
Maximum power loss at which the capacitor may be operated at the maximum case temperature.

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Life Expectancy

The Life expectancy of DCL-41 metallized polypropylene film capacitor Is very closely linked with the operating temperature and operating voltage of the capacitor.

The life expectancy is related to the capacitors rated voltage and the maximum hotspot temperature(85^{0}C) The simultaneous operating of capacitor at highest permissible voltage and operating temperature should be avoided.

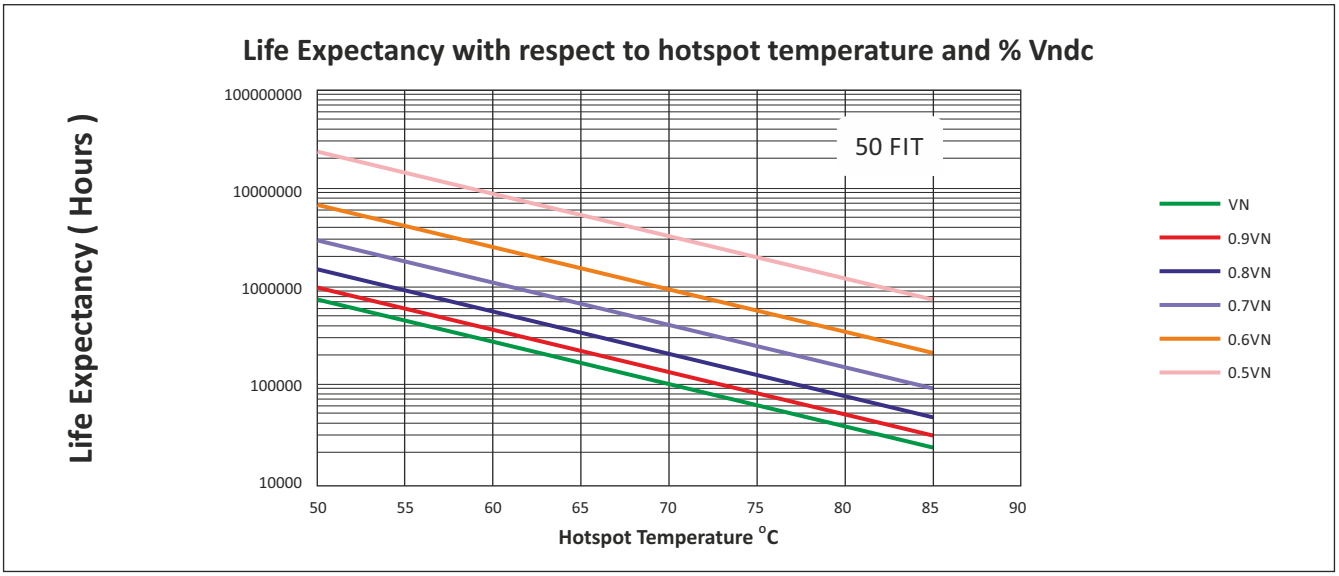
Please note there are no frequency or ripple current multiplying factors in case of metallized film DC link capacitors as compared to Aluminum electrolytic capacitors.

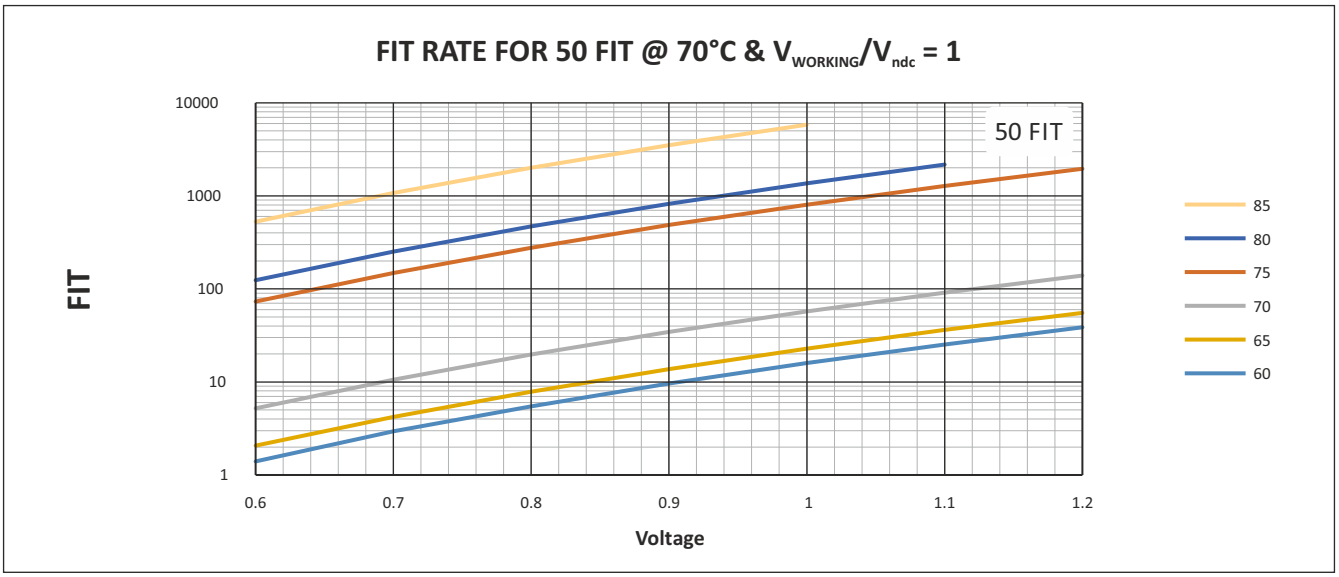
The life expectancy can be calculated from the formula and the look up graph given below:

Life Expectancy

Steps to calculate Hotspot Temperature

1. locate the capacitor and the ESR from the Electrical specifications (Data sheet).
2. Heat dissipation = (Irms² x ESR).
3. Get the value for Rth (^{0}C/watt) .... Data sheet.
4. Calculate internal temperature rise = (Irms² x ESR) x R_{th} (^{0}C/watt).
5. Hotspot temperature of capacitor = T Ambient +(Irms² x ESR) x R_{th} (^{0}C/watt).





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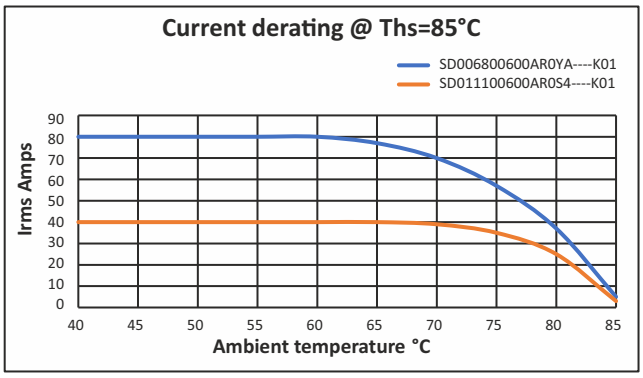
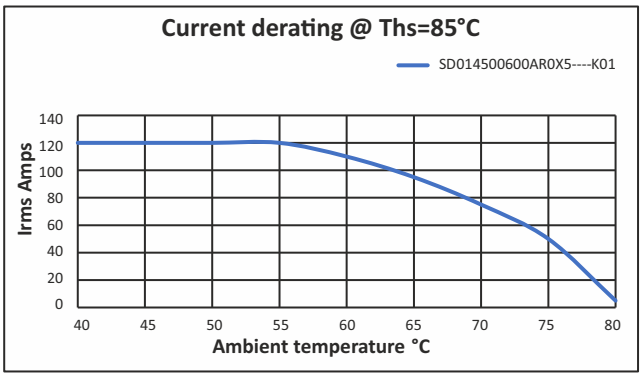
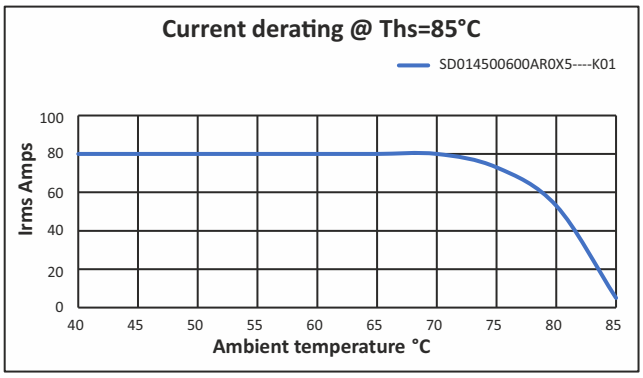
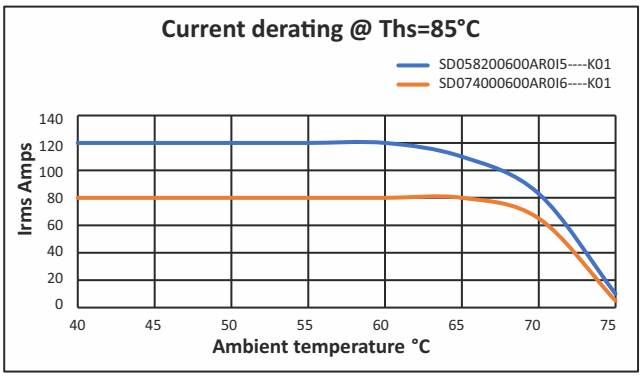
Current Derating

Current derating graphs for capacitors 600 vdc

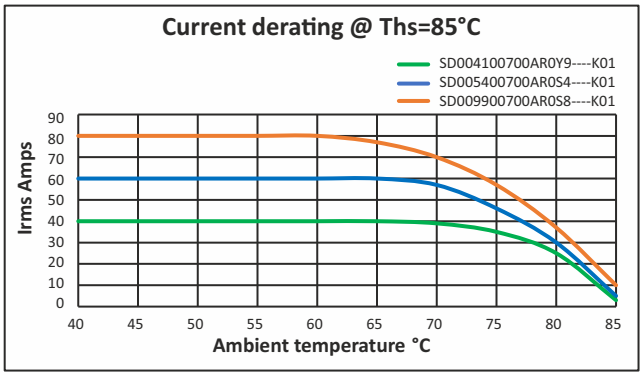


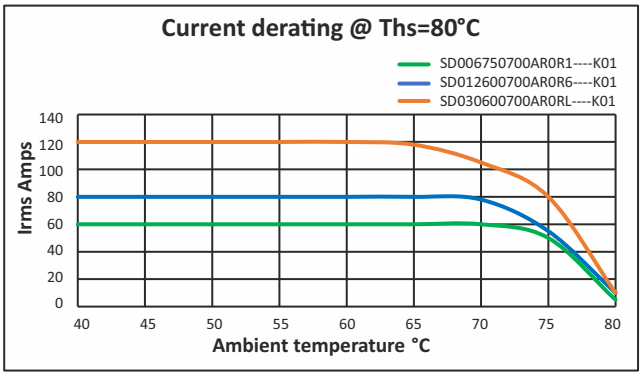


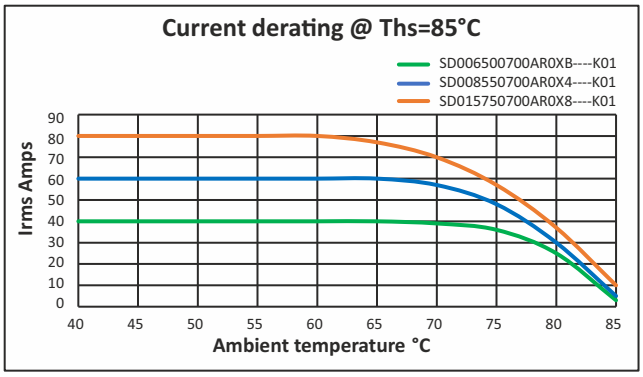


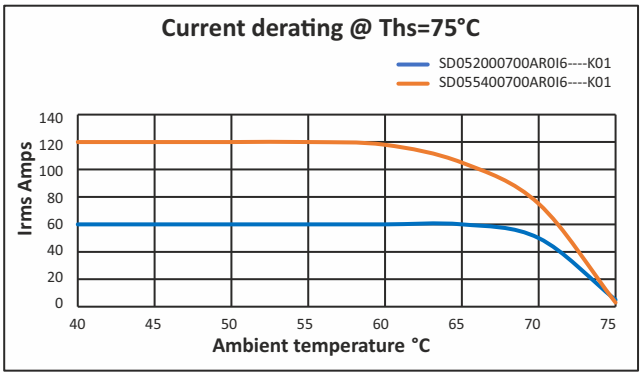


Current derating graphs for capacitors 700 vdc









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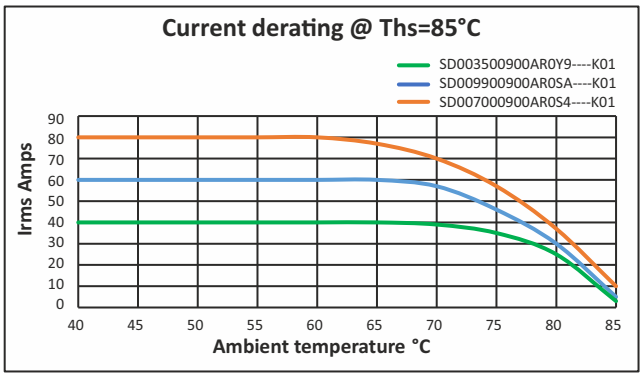
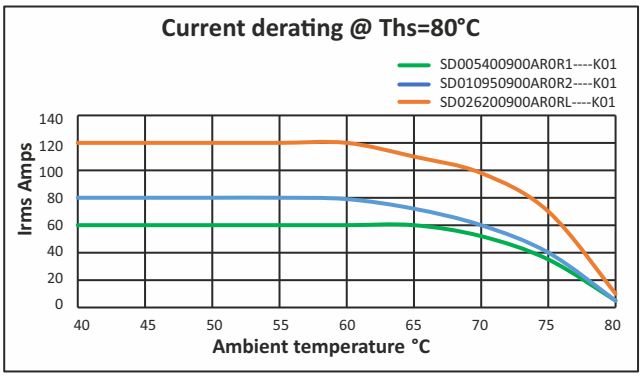
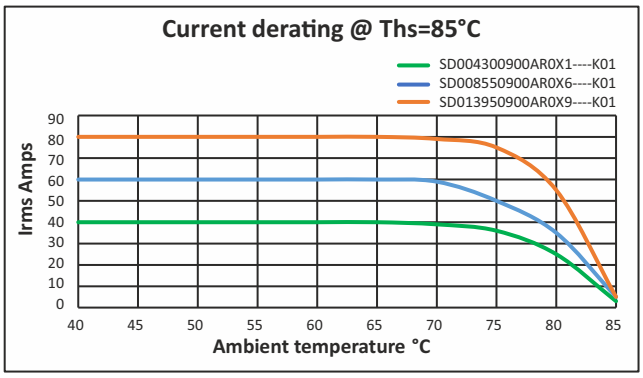
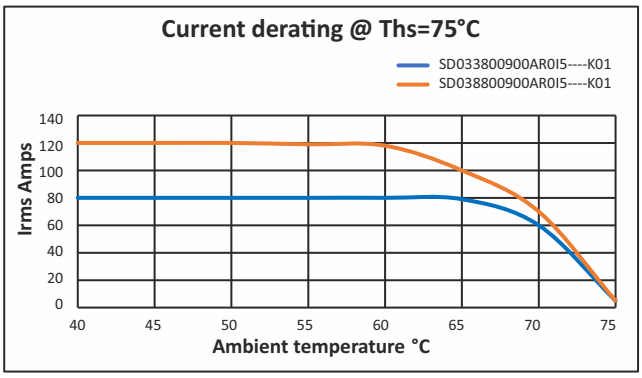
Current Derating

Current derating graphs for capacitors 900 vdc

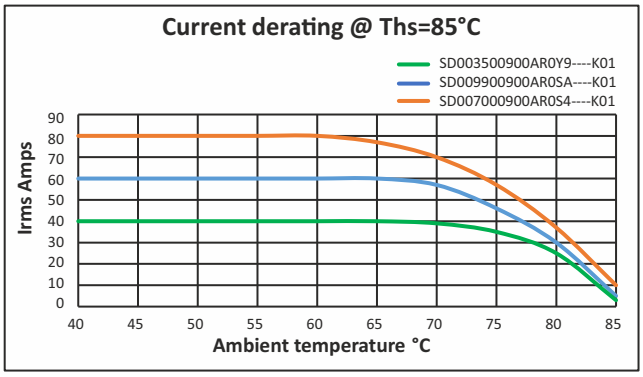


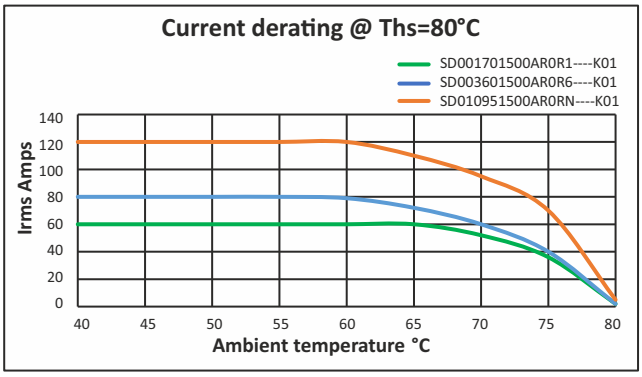


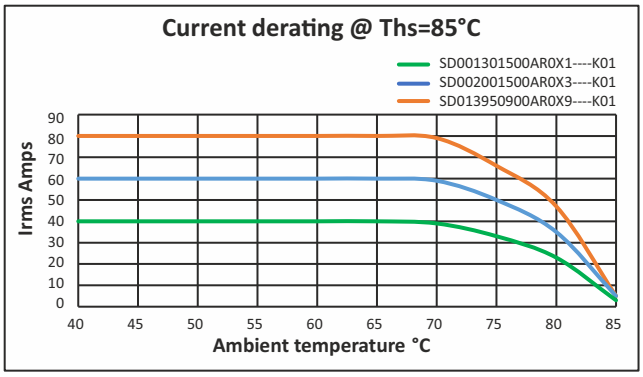


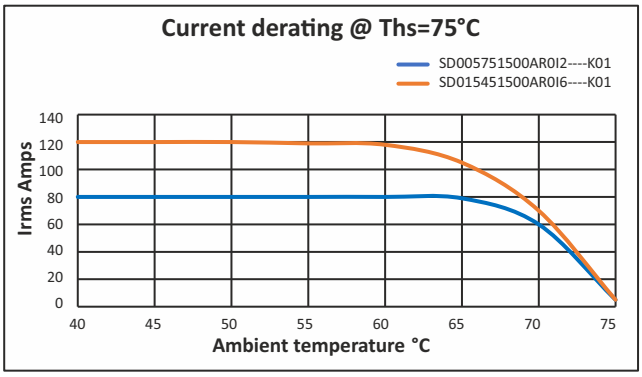


Current derating graphs for capacitors 1500 vdc









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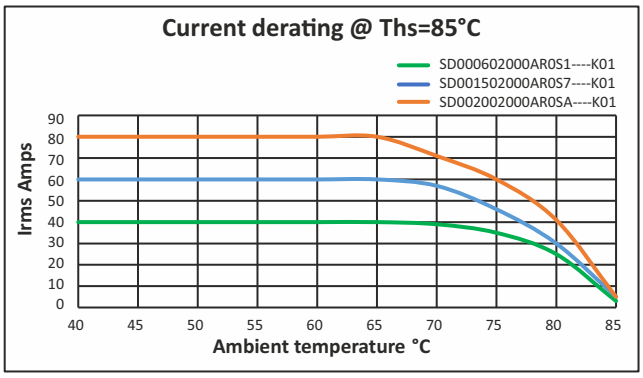
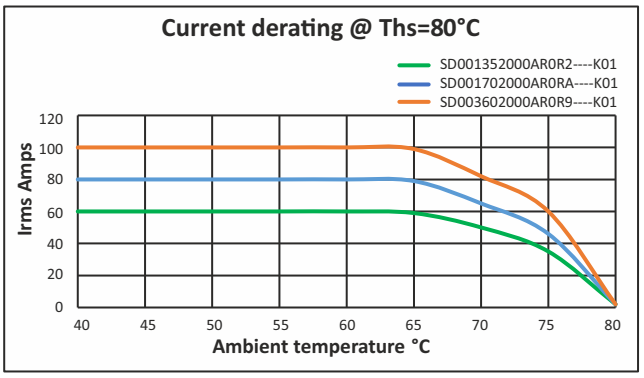
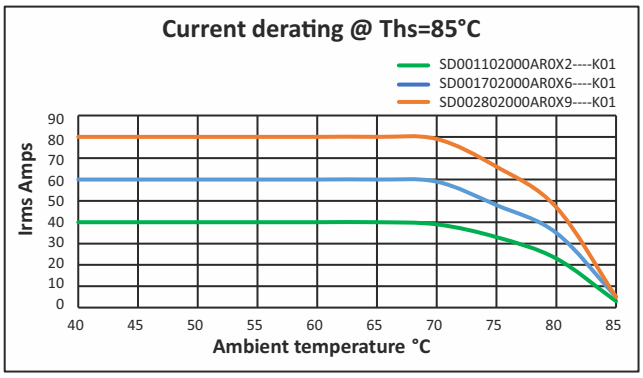
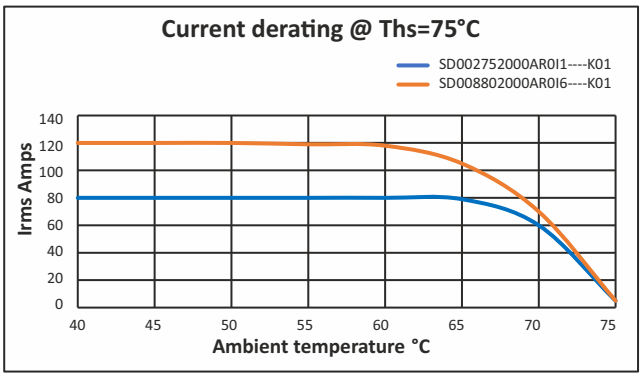
Current Derating

Current derating graphs for capacitors 2000 vdc









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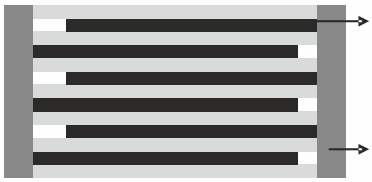
Highlights

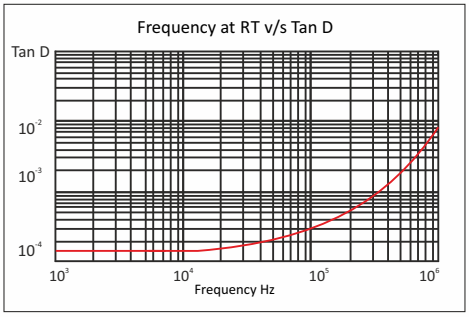
- Self-Inductance as low as 30nH
- ESR as low as 0.5 mΩ
- Low profile
- High thermal conductivity
- Life expectancy as high as 100 Khrs
- Axial stud terminals
- Flame retardant UL94 - V0, ROHS compliant

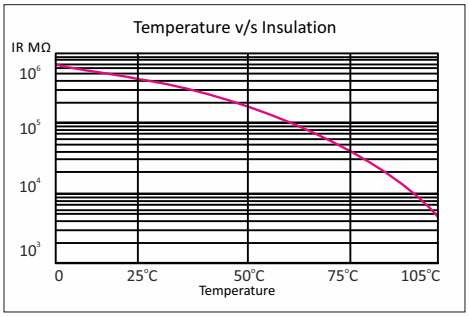
Construction

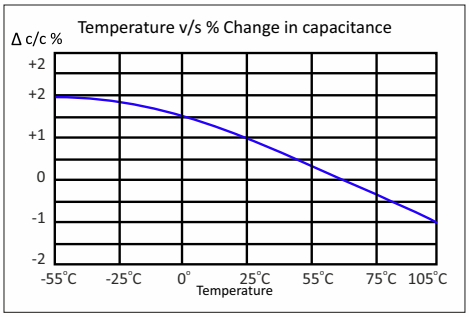


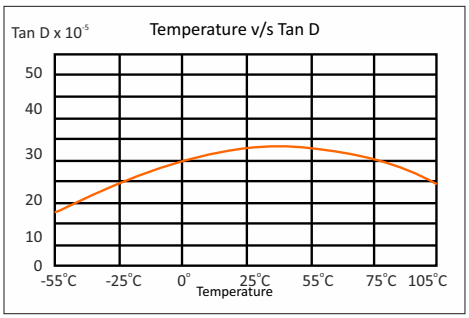
Applications

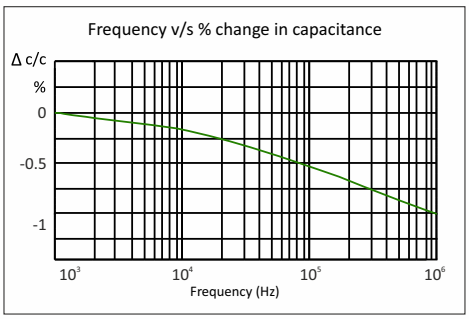
- DC filtering
- Wind power inverters
- Solar power inverters
- Induction heaters
- Electric vehicle inverters
- Motor drives











DCL-50

Technical Specifications

Physical Characteristics

▪ Electrode material	Metallized polypropylene film
▪ Winding construction	Polypropylene film, metallized polypropylene film
▪ Enclosure	UL 94-V0 Polyester tape wrap and epoxy filled
▪ Terminals	Nickel plated brass

Electrical Characteristics

▪ Capacitance range	20 µF to 265µF
▪ Capacity tolerance	±5%(J), ±10%(K)
▪ Rated voltage VDC	700, 800, 900, 1000, 1200, 1400, 1600, 1800
▪ Test voltage between terminals	1.3 x rated voltage VDC for 60 seconds (not to be repeated)
▪ Test voltage terminal to case	3KVAC at 50Hz for 60 seconds
▪ Dissipation factor (Tan d)	≤0.0015 at 100Hz and 25°C
▪ Temperature range	-55°C to +105°C
▪ Insulation resistance MΩ x µF	≥5,000 S at 25°C (S = MΩ x µF)
▪ Reference Standard	IEC 61071 and IEC 60068

Marking on Capacitors

Each capacitor will have the following information printed on it, sequentially:

- The Company name in words ALCON
- The capacitor grade viz DCL-50
- The capacitance value MFD
- The rated voltage VDC
- The max current Arms
- Capacity tolerance and manufacturing code
- Part number on non-standard capacitors

DCL-50

Standard Capacitors Values

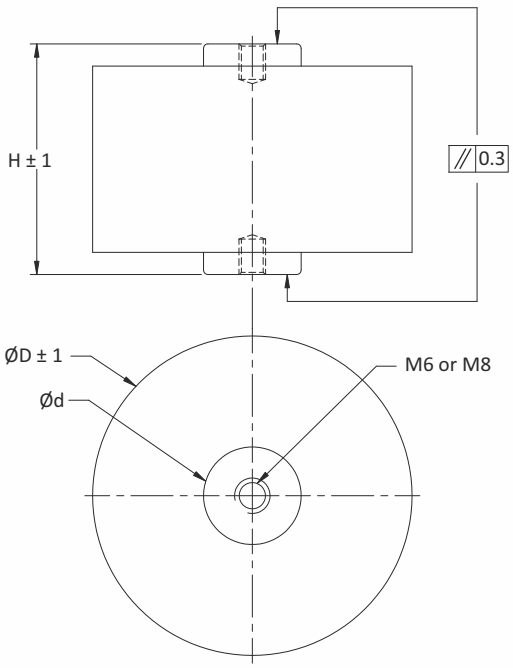
Rated voltage VDC	Nominal Capacitance MFD at 1 KHz	Case size ϕ x Lmm	Case Code	Typical ESR mΩ at Fr* KHz	Fr* KHz	Rise in core temperature per watt dissipated °C	Ripple current rating Irms at 10 KHz to 100KHz					Ordering Code
							25°C	45°C	65°C	85°C	105°C	
700	90	85 x 51	Y2	0.65	156	14.2	60	52	44	30	7	SD000900700AP0Y2_ _ _ _K01
	145	85 x 63	Y5	0.75	105	12.3	64	55	46	32	8	SD001450700AP0Y5_ _ _ _K01
	200	85 x 76	Y6	0.95	71	10.8	58	50	42	29	7	SD002000700AP0Y6_ _ _ _K01
	265	85 x 91	Y7	1.65	61	8.9	51	45	37	26	6	SD002650700AP0Y7_ _ _ _K01
900	85	85 x 51	Y2	0.58	168	14.2	56	48	39	27	5	SD000850900AP0Y2_ _ _ _K01
	120	85 x 63	Y5	0.78	98	12.3	62	54	47	34	8	SD001200900AP0Y5_ _ _ _K01
	160	85 x 76	Y6	0.97	73	10.8	57	51	43	30	9	SD001600900AP0Y6_ _ _ _K01
	200	85 x 91	Y7	1.70	69	8.9	50	43	35	25	5	SD002000900AP0Y7_ _ _ _K01
1000	55	85 x 51	Y2	0.80	176	14.2	57	49	41	25	7	SD000551000AP0Y2_ _ _ _K01
	70	85 x 51	Y2	1.00	182	14.2	58	50	42	29	7	SD000701000AP0Y2_ _ _ _K01
	100	85 x 63	Y5	0.80	136	12.3	59	51	43	30	7	SD001001000AP0Y5_ _ _ _K01
	130	85 x 76	Y6	1.18	91	10.8	52	45	37	27	6	SD001301000AP0Y6_ _ _ _K01
	150	85 x 91	Y7	2.21	75	8.9	46	40	33	23	5	SD001501000AP0Y7_ _ _ _K01
1200	60	85 x 51	Y2	1.05	254	14.2	48	41	35	25	6	SD000601200AP0Y2_ _ _ _K01
	80	85 x 63	Y5	1.19	179	12.3	49	43	35	25	6	SD000801200AP0Y5_ _ _ _K01
	110	85 x 76	Y6	1.46	116	10.8	46	40	33	23	5	SD001101200AP0Y6_ _ _ _K01
	122	85 x 91	Y7	2.80	96	8.9	38	33	27	19	5	SD001221200AP0Y7_ _ _ _K01
1400	30	85 x 51	Y2	1.28	294	14.2	42	37	30	21	5	SD000301400AP0Y2_ _ _ _K01
	45	85 x 63	Y5	1.47	218	12.3	43	37	31	22	5	SD000451400AP0Y5_ _ _ _K01
	60	85 x 76	Y6	1.87	143	10.8	41	35	29	21	5	SD000601400AP0Y6_ _ _ _K01
	75	85 x 91	Y7	3.81	124	8.9	35	30	25	18	4	SD000751400AP0Y7_ _ _ _K01
1600	28	85 x 51	Y2	1.48	352	14.2	41	36	30	21	5	SD000281600AP0Y2_ _ _ _K01
	40	85 x 63	Y5	1.71	260	12.3	41	36	30	21	5	SD000401600AP0Y5_ _ _ _K01
	50	85 x 76	Y6	2.18	171	10.8	39	34	28	20	5	SD000501600AP0Y6_ _ _ _K01
	60	85 x 91	Y7	4.56	151	8.9	32	28	23	16	4	SD000601600AP0Y7_ _ _ _K01
1800	20	85 x 51	Y2	1.69	460	14.2	38	33	27	19	5	SD000201800AP0Y2_ _ _ _K01
	28	85 x 63	Y5	1.86	336	12.3	39	33	28	20	5	SD000281800AP0Y5_ _ _ _K01
	40	85 x 76	Y6	2.81	226	10.8	33	29	24	17	4	SD000401800AP0Y6_ _ _ _K01
	46	85 x 91	Y7	5.63	185	8.9	29	25	21	15	3	SD000461800AP0Y7_ _ _ _K01

Custom designed capacitors are available on request

* Fr =Typical resonant frequency (Tol.±30%)

DCL-50

Capacitor Drawing and Terminal Styles



Terminal Style : STD

Tightening torque 6Nm max.

Dimensions in mm

DCL-50

Life Expectancy

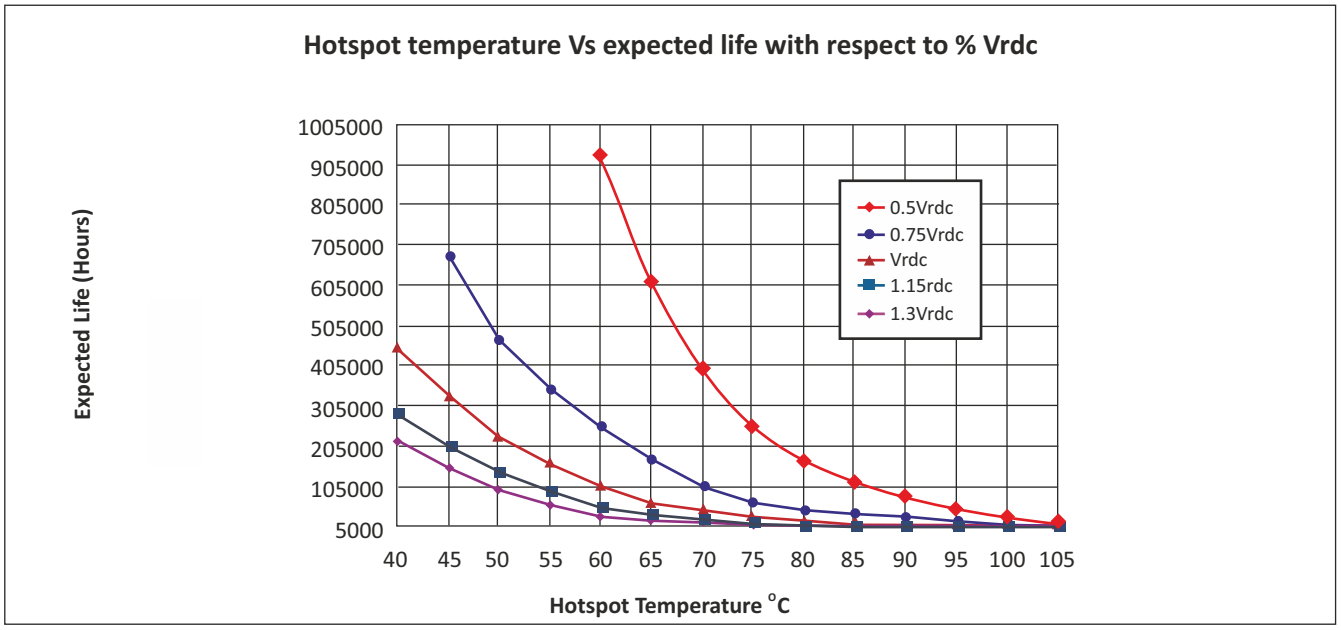
Table 1

Can size D x H	Rth °C/Watt
85 x 51	14.2°C
85 x 63	12.3°C
85 x 76	10.8°C
85 x 91	8.9°C

Steps to calculate Hotspot Temperature

- Locate the capacitor and the ESR from the electrical specifications
- Dissipated heat = ($Irms^2$ x ESR)
- Get the value from table 1 for Rth (°C/watt)
- Calculate internal temperature rise = ($Irms^2$ x ESR) x Rth (°C/watt)
- Hotspot temperature of capacitor = T Ambient + ($Irms^2$ x ESR) x Rth (°C/watt)
- From the graph given below expected life can be obtained
- Ensure that the voltage and current specification are not exceeded

Example: If 120 MFD/900 VDC is being used at 50 Arms in a 45°C Ambient; then ESR from the table (on page 4) = 0.00078Ω and the case size is Ø85 x 51mm
The dissipated wattage = 50 x 50 x 0.00078Ω = 1.95 watts
Temperature rise = 1.95 x 12.3°C/Watt = 23.98°C say 24
The hotspot core temperature inside the capacitor = 45°C (Ambient) + 24 (Rise) = **69 say 70°C**
From the graph below: If the capacitor is being used at 75% of Vrdc then the expected life will be approx 105,000 hours



Part Number System

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	**2**	**3 to 7**					**8 to 11**				**12-13**		**14-16**			**17-20**				**21**	**22-23**	

1 **Standard / Non-standard**

S - Standard

N - Non-standard

2 **Series**

A - Aluminium Electrolytic Capacitors

I - IGBT Snubber Capacitors

D - DC-Link Capacitors

P - Power Film Capacitors

3 to 7 **Capacitance Rating**

example : 04U70 - 4.7MFD
00118 - 118 MFD
00030 - 30 MFD
01080 - 1080 MFD
02350 - 2350 MFD

8to11 **Voltage Rating**

example : 0700 - 700 VDC/VRMS
1600 - 1600 VDC/VRMS
1000 - 1000 VDC/VRMS
0900 - 900 VDC/VRMS

12-13 **Grade**

example : AP - DCL- 50
AR - DCL- 41
AQ - DCL- 23
AO - DCL- 6
DC - DCL - 14

14-16 **Case code**

(Refer Standard Capacitor Values Table)

17-20 **Terminal Style**

(Refer Capacitor Drawing and Terminal Styles Page)

21 **Tolerance**

K : ± 10%
J : ± 5%
M : ± 20%

22-23 **By Default**

- 01

Cautions For Proper Use Of Film Capacitor

SAFETY INSTRUCTION

- Do not exceed the upper category temperature (UCT).
- Do not apply any mechanical stress to the capacitor terminals.
- Avoid any compressive, tensile or flexural stress.
- Do not move the capacitor after it has been assembled
- Do not exceed the specified torque limits during assembly.
- Avoid external energy inputs, such as fire or electricity.
- Avoid overload of the capacitors.
- Consult us if application is with severe temperature and humidity condition.
- There are no serviceable or repairable parts inside the capacitor. Opening the capacitor or any attempts to open or repair the capacitor will void the warranty and liability of ALCON

DISPOSAL

For disposal do either of the followings.

1. Incineration (at high temperature over 800°C) after piercing or crushing capacitor body.
2. Consignment to specialists of industrial waste. As per the compliance prescribed by the law.

Notes

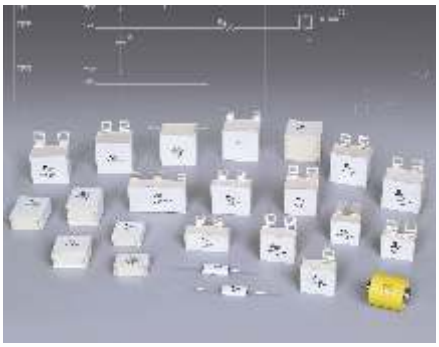
Other Products

Power Film Capacitors- High and Medium Frequency

Capacitance Range	- 0.010 MFD to 85 MFD
Max Power	- 100 KVAR to 1500 KVAR
Frequency Range	- 5.2 KHz to 1900 KHz
Max Current	- Up to 3000 Amps

Typical Applications

Induction Heating, Plasma Generators, Medical Equipment, Wireless EV Chargers, Magnetisers and Traction Equipment.



IGBT Snubber Capacitors- Direct Mounting & Axial

Capacitance Range	- 0.01 MFD to 6.3 MFD
Rated Voltage Range	- 600 VDC to 3000 VDC
Mounting Pitch	- 22, 23, 23.5, 24.5, 25, 26.50, 27, 27.5, 37, 37.5, 38, 38.5, 48.5, 55, 57.5, 78 mm (for direct mounting type)
I_{RMS} max.	- 2 Amps to 34.50 Amps

Typical Applications

Multi Level IGBT Snubber, IGBT Protection, Snubber Networks Protection Circuits, SMPS, Resonance Tank Circuits.

Aluminium Electrolytic Capacitors

Capacitance Range	- 330 MFD to 470000 MFD
Rated Voltage Range (VDC)	- 50 VDC to 550 VDC
Can Sizes	- 35 mm Ø x 80 L mm to 120 mm Ø x 240 L mm
Temperature Rating	- 40°C to + 70°C 40°C to + 85°C 40°C to + 105°C

Typical Applications

High ripple current applications like PWM Inverters, High KVA online UPS, Frequency converters, AC drives, High reliability power supplies, solar and wind inverters. HED range is designed for large instant energy discharge applications like Laser, X-ray equipment, welding machines, magnetisers & other pulse discharge applications

ALSO AVAILABLE

CUSTOM DESIGNED CAPACITORS

AUTHORISED DISTRIBUTOR

Designed and Printed by Delta Graphics

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