CM-HVLP

High Voltage, Low Profile, SMD Capacitors

MAIN FEATURES

- Composite reconstituted Mica
- High Voltage
- Low Profile
- SMD copper lead, Tin plated
- High Energy Density

APPLICATIONS

- Motor Engine Exciter
- Thruster, Propulsion Power Unit
- Ignition system, PFN and other rapid pulse applications
- Traveler Wave Tube (TWT) for radars and seekers
- High Voltage Filtering

DIELECTRIC

Reconstituted Mica
Epoxy resin impregnated

TECHNOLOGY

Metal foils
Non-inductive
Epoxy resin molded

STANDARD QUALIFICATIONS

ISO 9001 RoHS

MECHANICAL CHARACTERISTICS

Casing	**Thermoplastic box, Epoxy resin sealed**
Leads	**SMD in Copper, Tin plated**
Electrodes	**Metal foils, very low ESL and ESR**
Operating Temperature	**–55°C to +125°C**
Climatic category	**55/125/56**

MARKING

CM-HVLP
Capacitance tolerance
Rated voltage / Discharge voltage
Date - code (year - week)

ELECTRICAL SPECIFICATION

Rated voltages U_{RC}	**V_{DC}**	**Long life DC filtering**
	V_{DISCH}	**Max. charge voltage for pulse applications**
Range of capacitances C_R		**From 10 nF to 750 nF**
Rated voltages U_{RC}		**2 500 V_{DISCH} to 5 000 V_{DISCH} 1 500 V_{DC} to 4 000 V_{DC}**
Dissipation factor (Tgδ) at 1 kHz	**C_R ≤1.5 nF**	**≤ 70.10^{-4}**
	C_R >1.5 nF	**≤ 50.10^{-4}**
Insulation resistance under 500 V		**Ri ≥ 25 000 MΩ**
Dielectric Withstanding Voltage		**1.4 V_{DC}**
Insulation between leads and case		**≥ 25 000 MΩ**
Typical ESL		**10 nH to 30 nH**

HOW TO ORDER

CM-HVLP	W	50nF	10%	1500V_{DC} - 2500V_{DISCH}	R2	–
Series	RoHS compliant	Capacitance	Tolerance	Rated voltage	Connection	–
CM-HVLP	**–** = No RoHS **W** = RoHS compliant	Capacitance value in clear	**±10%** **±20%**	**1500V_{DC} 2500V_{DISCH}** **2000V_{DC} 3000V_{DISCH}** **2500V_{DC} 3500V_{DISCH}** **3000V_{DC} 4000V_{DISCH}** **4000V_{DC} 5000V_{DISCH}**	**Standard type R2** See dimensional drawing **Optional version type R1** See dimensional drawing	**–**

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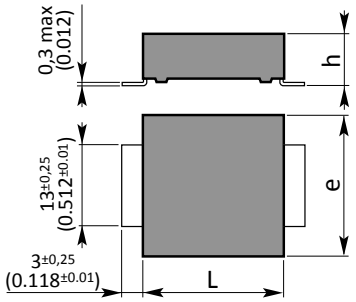
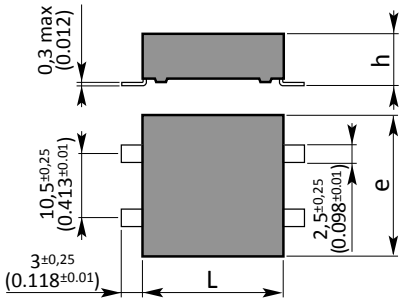
DIMENSIONAL DRAWING

Connection type R2



Connection type R1 (this option applies exclusively to cases A, B, C, and D)



DIMENSIONS in mm (inches)

Case code	L		h		e		Weight
	mm	(inches)	mm	(inches)	mm	(inches)	g
A	20	(0.787)	6,5	(0.256)	20	(0.787)	6
B	20	(0.787)	8,0	(0.315)	20	(0.787)	7
C	20	(0.787)	12,5	(0.492)	20	(0.787)	11
D	20	(0.787)	20	(0.787)	20	(0.787)	18
E	32	(1.260)	12,5	(0.492)	31	(1.220)	28
F	32	(1.260)	22	(0.866)	31	(1.220)	48
	± 0,5	±(0.020)	± 1	±(0.039)	± 0,5	±(0.020)	max.

Tolerances on dimensions in mm (inches)

Not available for connection type R1

CAPACITANCE AND RATED VOLTAGE (DC)

Case code	1 500 V_{DC} 2 500 V_{DISCH}		2 000 V_{DC} 3 000 V_{DISCH}		2 500 V_{DC} 3 500 V_{DISCH}		3 000 V_{DC} 4 000 V_{DISCH}		4 000 V_{DC} 5 000 V_{DISCH}	
	C_R min.	C_R max.	C_R min.	C_R max.	C_R min.	C_R max.	C_R min.	C_R max.	C_R min.	C_R max.
A		50 nF		40 nF		25 nF		20 nF		10 nF
B	55 nF	70 nF	44 nF	55 nF	27 nF	35 nF	22 nF	25 nF	11 nF	15 nF
C	75 nF	120 nF	60 nF	100 nF	38 nF	70 nF	27 nF	50 nF	16 nF	25 nF
D	130 nF	220 nF	110 nF	160 nF	75 nF	110 nF	55 nF	85 nF	27 nF	45 nF
E	240 nF	350 nF	175 nF	300 nF	120 nF	200 nF	93 nF	180 nF	50 nF	110 nF
F	380 nF	750 nF	330 nF	600 nF	220 nF	450 nF	195 nF	360 nF	120 nF	220 nF

Capacitance Tolerance / ± 20 % - ± 10 %

For intermediate value, the dimensions are those of the immediately superior value

Not available for connection type R1