

MKRS

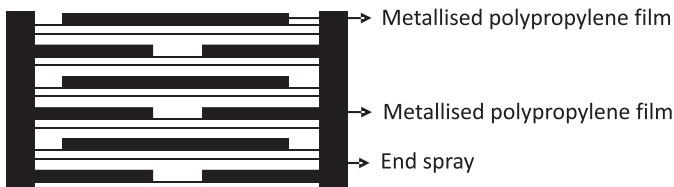


Highlights

- Self-healing property
- High DV / DT
- Low ESR
- Low loss polypropylene dielectric
- Reference standard-IEC 61071
- Flame retardant UL94 - V0, ROHS compliant

Construction

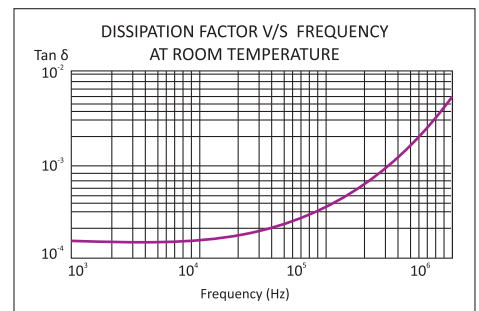
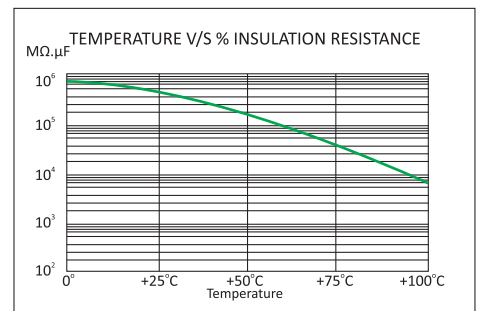
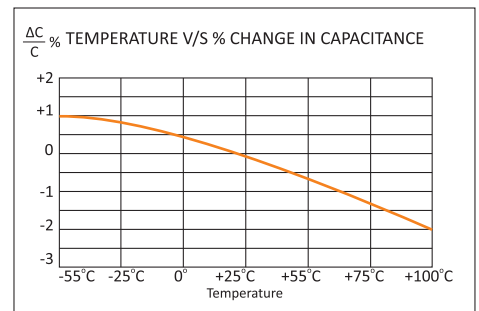
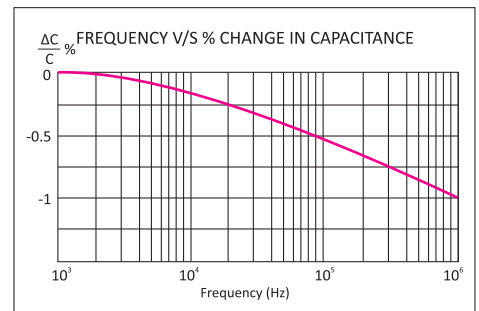
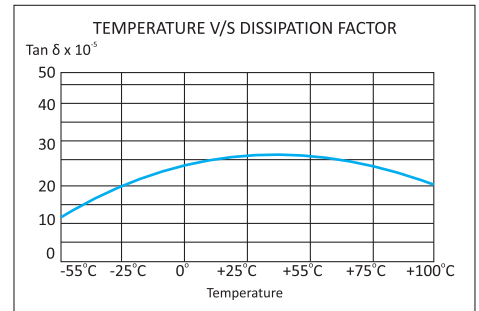
Extended double metallised polyester electrodes with metallised polypropylene dielectric internal series connection



Applications

These capacitors are used in high voltage, high current and high pulse applications such as:

- IGBT protection circuits
- Snubber networks
- Energy conversion and control in power electronics
- Protection circuits in SMPS



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Technical Specifications

Physical Characteristics


- | | |
|------------------------|--|
| ▪ Dielectric material | Polypropylene film. |
| ▪ Electrode material | Metallized polypropylene film. |
| ▪ Winding construction | Metallised polypropylene dielectric internal series connection |
| ▪ Enclosure | Preformed UL 94 V-0 plastic case with thermosetting resin-fill |

Electrical Characteristics

- | | |
|---|---|
| ▪ Capacitance range | 0.1 MFD to 2.0 MFD |
| ▪ Capacity tolerance | ±5%(J), ±10%(K) |
| ▪ Rated voltage VDC | 600, 700, 1000, 1200, 1500, 2000, 2500 |
| ▪ Test voltage between terminals | 1.5 x rated voltage VDC for 2 seconds |
| ▪ Test voltage terminal to case | 3KVAC at 50Hz for 60 seconds |
| ▪ Dissipation factor (Tan d) | ≤0.0005 at 1 KHz and 25°C |
| ▪ Temperature range | -40°C to +105°C |
| ▪ Insulation resistance at 25°C & at a test voltage of 500 VDC applied for 1 minute | C ≤ 0.33 MFD ≥100,000MΩ
C > 0.33 MFD ≥30,000MΩ |

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 MKRS
- The capacitance value MFD
- The rated voltage VDC
- Capacity tolerance and manufacturing code
- Part number on non-standard capacitors

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Standard Capacitor Values

Rated Capacitance MFD	Rated DC Voltage	Rated AC Voltage	Case Code	Case Size			DV/DT V/ μ Sec	I Peak Amps	I rms Max at 100KHz & 70°C Amps	Typical ESR at 100KHz m Ω	Ordering Code*
				B	H	L					
0.1 +0.1	2500	700	H11	20	40	80	828	83	14	10.0	SI00U202500MKH113PL_01
0.15+0.15	2500	700	H11	20	40	80	828	124	15	7.2	SI00U302500MKH113PL_01
0.22 + 0.22	2000	600	H11	20	40	80	828	182	16	5.1	SI00U442000MKH113PL_01
0.33 + 0.33	2000	600	H11	20	40	80	828	273	17	4.1	SI00U662000MKH113PL_01
0.47+0.47	1500	500	H11	20	40	80	828	389	18	3.7	SI00U941500MKH113PL_01
0.68 + 0.68	1200	400	H11	20	40	80	828	563	19	3.3	SI01U361200MKH113PL_01
0.82 + 0.82	1200	400	H11	20	40	80	828	679	19	3.1	SI01U641200MKH113PL_01
1.0 + 1.0	1000	350	H11	20	40	80	828	828	20	3.0	SI000021000MKH113PL_01
1.2 + 1.2	1000	350	H11	20	40	80	828	994	20	2.8	SI02U401000MKH113PL_01
1.5 + 1.5	700	250	H11	20	40	80	828	1242	21	2.7	SI000030700MKH113PL_01
1.75 + 1.75	700	250	H11	20	40	80	828	1449	22	2.5	SI03U500700MKH113PL_01
2.0 + 2.0	600	200	H11	20	40	80	828	1656	24	2.4	SI000040600MKH113PL_01

Capacitor Drawings and Terminal Styles

