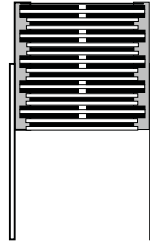






Metallized Polypropylene Capacitor -Radial

MP3S



-  Double side metallized polyester film.
-  Metallized Polypropylene Film
-  Metal spray layer
-  Connecting wire

Construction:

Dielectric : Polypropylene Film .
 Electrodes : Double side metallized polyester film.
 Winding : non-inductive type&internal series connection.
 Leads : Tinned Wire.
 Outer coating : Flame retardant plastic case and epoxy resin filled.

Feature:

Low Dissipation Factor at high frequency.
 Excellent corona voltage.
 Very high pulss strength.
 Small in size

Recommended Application:

Electronic lighting(ballast&car headlamp).
 Switching power supply circuits.
 Pulse applications with high AC voltage and high Current.

Electrical Characteristics:

| | | | | | |
|--|--|-----------|-------------------|-----------|----------|
| Related Documents | IEC 60384-16 | | | | |
| Rated Voltage | 400VDC(250VAC),630VDC(400VAC),1000VDC(600VAC) | | | | |
| Rated Temperature | ~ +85°C for Vr(DC), ~ +75°C for Vr(AC). | | | | |
| Usable upper category temperature | +105°C Derating ratio of rated voltage to +85°C ~ +105°C: 1.25% per °C for Rated Voltage (DC) Derating ratio of rated voltage to +75°C ~ +105°C: 1.35% per °C for Rated Voltage (AC) | | | | |
| Capacitance Range | 0.001 μF ~ 2.2 μF. | | | | |
| Capacitance Tolerance | ± 2% (G) , ± 3% (H) , ± 5% (J) , ± 10% (K) | | | | |
| Dissipation Factor | KHz | C ≤ 0.1uF | 0.1uF < C ≤ 1.0uF | 1.0uF ≤ C | |
| | 1 | ≤ 0.05% | ≤ 0.05% | ≤ 0.05% | |
| | 10 | ≤ 0.06% | ≤ 0.07% | | |
| | 100 | ≤ 0.15% | | | |
| Insulation Resistance | Terminal to Terminal: (at 25°C± 5°C), Voltage charge time : 1minute. Voltage charge : 100VDC. ≥ 50000MΩ For C ≤ 0.1uF , ≥ 10000MΩ×uF For C > 0.1uF | | | | |
| Withstand Voltage | Terminal to Terminal: (at20°C± 5°C) 1.6 × Vr applied for 2sec. (cut off current 10mA) Slow-up voltage speed:100V/sec | | | | |
| Rated Voltage Pulse Slope dV/dt (V/μs) | Pitch | 10m/m | 15m/m | 22.5m/m | 27.5 m/m |
| | V _R | | | | |
| | 400 VDC | 1500 | 900 | 500 | 300 |
| | 630VDC | 3000 | 2500 | 1500 | 900 |
| 1000 VDC | 4800 | 3300 | 2100 | 1000 | |

Metallized Polypropylene Capacitor -Radial

MP3S

Reliability Test :

| Item | Test Method | Requirements |
|---|--|--|
| Resistance to soldering heat IEC 60068-2-20" | Solder bath: 260°C± 5°C Immersion time: 10sec± 1sec | Capacitance change ΔC/C ≤ 1 % DF change Δtanδ: 0.1% at 1Khz IR: ≥ limit value. |
| Resistance to vibration IEC 60068-2-6 " | Frequency range: 10hz to 55hz Amplitude: 1.5 m/m Duration : 6 hours | There shall be no visible damage, no intermittent contact, no open or short circuit |
| Damp heat ,steady state IEC 60068-2-3" | Temperature: 40°C± 2°C Relative humidity: 90% to 95% Duration : 1000 hours | Capacitance change ΔC/C ≤ 3 % DF change Δtanδ: 0.1% at 1Khz IR: ≥ 50% limit value. |
| Electrical endurance IEC 60384-2" | Temperature: 85°C± 2°C Voltage applied: 1.25×Vr(DC) Duration : 2000 hours | Capacitance change ΔC/C ≤ 3 % DF change Δtanδ: 0.1% at 1Khz IR: ≥ 50% limit value. |

Cap.(μF) R.V.

| R.V. Size Cap. | 400VDC | | | | 630VDC | | | | 1000VDC | | | |
|----------------------|--------|------|-----|------|--------|------|-----|------|---------|------|------|------|
| | W | H | T | P | W | H | T | P | W | H | T | P |
| 0.0018 | | | | | | | | | | | | |
| 0.0022 | | | | | | | | | | | | |
| 0.0027 | | | | | | | | | | | | |
| 0.0033 | | | | | | | | | | | | |
| 0.0039 | | | | | | | | | | | | |
| 0.0047 | | | | | | | | | 13 | 11 | 5 | 10 |
| 0.0056 | | | | | | | | | 13 | 11 | 5 | 10 |
| 0.0068 | | | | | | | | | 13 | 11 | 5 | 10 |
| 0.0082 | | | | | | | | | 13 | 11 | 5 | 10 |
| 0.01 | 13 | 9 | 4 | 10 | 13 | 10 | 5 | 10 | 13 | 12 | 6 | 10 |
| 0.012 | 13 | 9 | 4 | 10 | 13 | 11 | 5 | 10 | 13 | 12 | 6 | 10 |
| 0.015 | 13 | 9 | 4 | 10 | 13 | 12 | 6 | 10 | 13 | 12 | 6 | 10 |
| 0.018 | 13 | 9 | 4 | 10 | 13 | 12 | 6 | 10 | 18 | 11 | 5 | 15 |
| 0.022 | 13 | 10 | 5 | 10 | 13 | 13 | 7 | 10 | 18 | 12 | 6 | 15 |
| 0.027 | 13 | 11 | 5 | 10 | 18 | 11 | 5 | 15 | 18 | 13 | 7 | 15 |
| 0.033 | 13 | 11 | 5 | 10 | 18 | 12 | 6 | 15 | 18 | 13.5 | 7.5 | 15 |
| 0.039 | 13 | 12 | 6 | 10 | 18 | 12 | 6 | 15 | 18 | 15.5 | 8 | 15 |
| 0.047 | 13 | 12 | 6 | 10 | 18 | 13 | 7 | 15 | 18 | 17 | 8 | 15 |
| 0.056 | 13 | 12 | 6 | 10 | 18 | 13.5 | 7.5 | 15 | 26 | 16 | 7 | 22.5 |
| 0.068 | 18 | 12 | 6 | 15 | 18 | 14 | 8 | 15 | 26 | 16.5 | 7 | 22.5 |
| 0.082 | 18 | 12 | 6 | 15 | 18 | 14.5 | 8.5 | 15 | 26 | 17 | 8 | 22.5 |
| 0.1 | 18 | 13 | 7 | 15 | 18 | 16 | 10 | 15 | 26 | 18.5 | 8.5 | 22.5 |
| 0.12 | 18 | 13.5 | 7.5 | 15 | 18 | 18 | 10 | 15 | 26 | 19 | 10 | 22.5 |
| 0.15 | 18 | 14.5 | 8.5 | 15 | 26 | 17 | 8 | 22.5 | 26 | 20 | 11 | 22.5 |
| 0.18 | 18 | 16 | 9 | 15 | 26 | 17 | 8 | 22.5 | 26 | 22 | 12.5 | 22.5 |
| 0.22 | 18 | 16 | 10 | 15 | 26 | 18 | 9 | 22.5 | 31 | 22 | 13 | 27.5 |
| 0.27 | 18 | 19 | 11 | 15 | 26 | 20 | 10 | 22.5 | 31 | 23.5 | 14 | 27.5 |
| 0.33 | 26 | 17 | 9 | 22.5 | 26 | 20 | 11 | 22.5 | 31 | 24.5 | 15 | 27.5 |
| 0.39 | 26 | 18 | 9 | 22.5 | 26 | 22 | 12 | 22.5 | 31 | 26 | 18 | 27.5 |
| 0.47 | 26 | 19 | 10 | 22.5 | 31 | 22 | 13 | 27.5 | 31 | 28 | 18 | 27.5 |
| 0.56 | 26 | 20 | 11 | 22.5 | | | | | 31 | 20.5 | 20 | 27.5 |
| 0.68 | 26 | 20 | 11 | 22.5 | 31 | 24.5 | 15 | 27.5 | 31 | 37 | 22 | 27.5 |
| 0.82 | 31 | 22 | 13 | 27.5 | | | | | | | | |
| 1.0 | 31 | 23.5 | 14 | 27.5 | 31 | 33 | 18 | 27.5 | | | | |
| 1.2 | 31 | 24.5 | 15 | 27.5 | | | | | | | | |

