

Type RA Radial PET Film Capacitors



The RA style capacitor is constructed in an efficient rugged self-encased size. The non-inductive multilayer metallized polyester film capacitor features a small size, high dv/dt capability, very low ESR at high frequency and a self-healing capability. RA type capacitors are ideal for use in high frequency switching power supplies, noise suppression, EMI reduction and long-life applications.

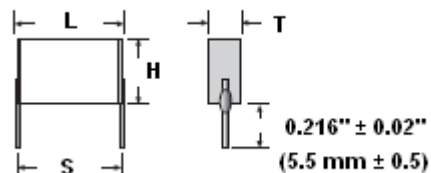
Highlights

- Efficient size
- Self healing
- Low ESR/ESL
- High dv/dt
- Wave solderable

Specifications

| | |
|-------------------------------------|--|
| Capacitance Range (at 1 kHz) | 0.1 to 10 μ F |
| Capacitance Tolerance | Standard Tolerance \pm 10% (K), Optional \pm 5% (J) or \pm 20% (M) |
| Rated Voltage | 100, 250, 400, 500 Vdc |
| Operating Temperature Range | -55 °C to 125 °C |
| Dissipation Factor (at 1 kHz/25 °C) | \leq 1.0% |
| Insulation Resistance | \geq 1,000 M Ω x μ F - Need not exceed 1,000 M Ω Test Voltage for 100 Vdc rating: 10 Vdc Test Voltage for >100 Vdc rating : 100 Vdc |
| Dielectric Strength | 1.6 x rated VDC for 2 seconds max. Bold P.N.: 1.3 x rated VDC for 2 seconds max. |
| Self Inductance (typical) | 2 to 6 nH |
| Temperature Range | -55° to +125°C at Rated DC Voltage Bold P.N.: -55° to +125°C (derate voltage 1.25% / °C above +85°C) |
| Life Test: | Apply 1.25 x the rated DC voltage for 1000 hours at +85°C. After the test, the capacitance, DF, and IR should meet the following: Capacitance change: \leq 5.0% DF will meet the initial specification Insulation Resistance will meet the initial specification |
| Moisture Test: | Subject the capacitor to +85°C / 85% RH for 21 days without voltage. After the test, the capacitance, DF, and IR should meet the following: Capacitance change: \leq 7.0% DF will meet the initial specification Insulation Resistance \geq 30% of the initial limit |
| Long Term Stability : | After 2 years of storage in a standard environment. Capacitance change: \leq 2.0% |
| Vibration | Mil Std 202 Method 204D |
| Solder Resistance | 260°C, 5 sec. Capacitance change: \leq 2.0% |
| RoHS Compliant | |

Outline Drawing



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Ratings

| Catalog Part Number | Capacitance (uF) | Dimensions (in.) | | | | | Dimensions (mm) | | | | | Max. dv/dt (V/us) |
|--------------------------|------------------|------------------|--------|--------|----------|-------|-----------------|--------|--------|---------|-----|-------------------|
| | | L Max. | T Max. | H Max. | S ± 0.02 | d | L Max. | T Max. | H Max. | S ± 0.5 | d | |
| 100 Vdc / 80 Vac | | | | | | | | | | | | |
| RA3224K100-FA | 0.22 | 0.350 | 0.155 | 0.280 | 0.295 | 0.025 | 8.9 | 3.9 | 7.1 | 7.5 | 0.6 | 75 |
| RA3474K100-FA | 0.47 | 0.350 | 0.180 | 0.305 | 0.295 | 0.025 | 8.9 | 4.6 | 7.7 | 7.5 | 0.6 | 65 |
| RA4105K100-FA | 1.0 | 0.450 | 0.175 | 0.285 | 0.394 | 0.025 | 11.4 | 4.4 | 7.2 | 10 | 0.6 | 35 |
| RA3225K100-FA | 2.2 | 0.350 | 0.250 | 0.350 | 0.295 | 0.025 | 8.9 | 6.3 | 8.9 | 7.5 | 0.6 | 25 |
| RA4225K100-FA | 2.2 | 0.450 | 0.205 | 0.285 | 0.394 | 0.025 | 11.4 | 5.2 | 7.2 | 10 | 0.6 | 25 |
| RA4335K100-FA | 3.3 | 0.450 | 0.250 | 0.350 | 0.394 | 0.025 | 11.4 | 6.3 | 8.9 | 10 | 0.6 | 25 |
| RA4405K100-FA | 4.0 | 0.450 | 0.200 | 0.380 | 0.394 | 0.032 | 11.4 | 5.1 | 9.7 | 10 | 0.8 | 20 |
| RA4505K100-FA | 5.0 | 0.450 | 0.220 | 0.480 | 0.394 | 0.032 | 11.4 | 5.6 | 12.2 | 10 | 0.8 | 20 |
| RA6106K100-FA | 10.0 | 0.650 | 0.260 | 0.460 | 0.591 | 0.032 | 16.5 | 6.6 | 11.7 | 15 | 0.8 | 13 |
| 250 Vdc / 160 Vac | | | | | | | | | | | | |
| RA4104K250-FA | 0.10 | 0.450 | 0.160 | 0.255 | 0.394 | 0.025 | 11.4 | 4.1 | 6.5 | 10 | 0.6 | 100 |
| RA4224K250-FA | 0.22 | 0.450 | 0.190 | 0.305 | 0.394 | 0.025 | 11.4 | 4.8 | 7.7 | 10 | 0.6 | 75 |
| RA4334K250-FA | 0.33 | 0.450 | 0.250 | 0.330 | 0.394 | 0.025 | 11.4 | 6.3 | 8.4 | 10 | 0.6 | 75 |
| RA4474K250-FA | 0.47 | 0.450 | 0.210 | 0.305 | 0.394 | 0.025 | 11.4 | 5.3 | 7.7 | 10 | 0.6 | 55 |
| RA6474K250-FA | 0.47 | 0.650 | 0.230 | 0.340 | 0.591 | 0.032 | 16.5 | 5.8 | 8.6 | 15 | 0.8 | 50 |
| RA6105K250-FA | 1.0 | 0.650 | 0.240 | 0.340 | 0.591 | 0.032 | 16.5 | 6.1 | 8.6 | 15 | 0.8 | 35 |
| 400 Vdc / 250 Vac | | | | | | | | | | | | |
| RA6224K400-FA | 0.22 | 0.650 | 0.230 | 0.340 | 0.591 | 0.032 | 16.5 | 5.8 | 8.6 | 15 | 0.8 | 65 |
| RA6474K400-FA | 0.47 | 0.650 | 0.290 | 0.440 | 0.591 | 0.032 | 16.5 | 7.4 | 11.1 | 15 | 0.8 | 120 |
| 500 Vdc / 250 Vac | | | | | | | | | | | | |
| RA6504K500-FA | 0.5 | 0.650 | 0.280 | 0.540 | 0.591 | 0.032 | 16.5 | 7.1 | 13.7 | 15 | 0.8 | 120 |

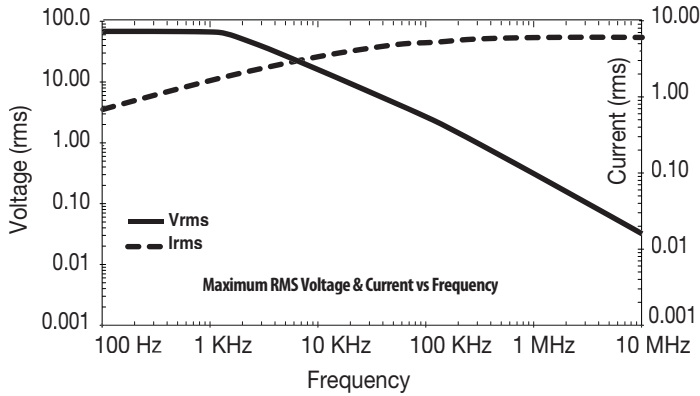
Part Numbering System

| | | | | | |
|-------------|------------------|--------------------|------------------|----------------|---|
| RA | 3 | 224 | K | 100 | -FA |
| | | | | | |
| Type | Case Size | Capacitance | Tolerance | Voltage | RoHS |
| | 3 = 0.3"=7.5 mm | 224 = 0.22 µF | K = ±10% | 100 = 100 Vdc | -FA = 10/10 Compliant w Sn plated wire leads |
| | 4 = 0.4"=10 mm | | | | (Blank = 9/10 compliant w SnPb wire lead finish) |
| | 6 = 0.6"=15 mm | | | | |

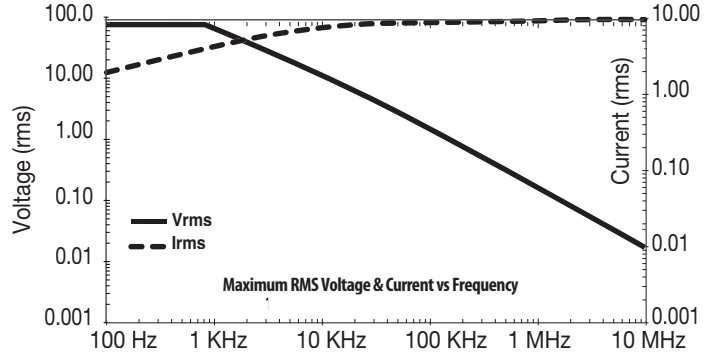
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Typical Performance Curves

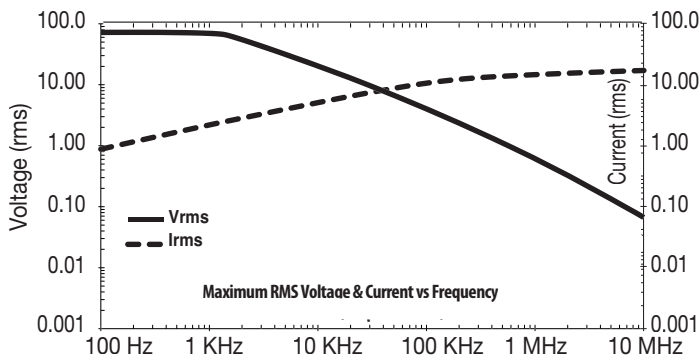
3.3 μ F 100 VDC RA4



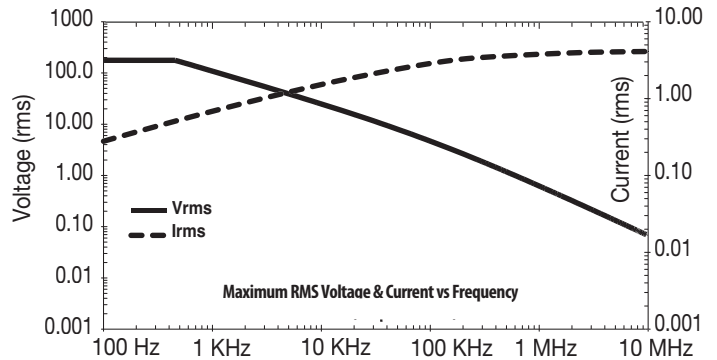
10.0 μ F 100 VDC RA6



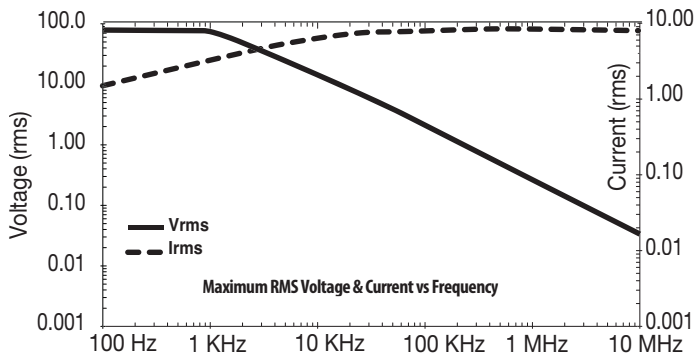
4.0 μ F 100 VDC RA4



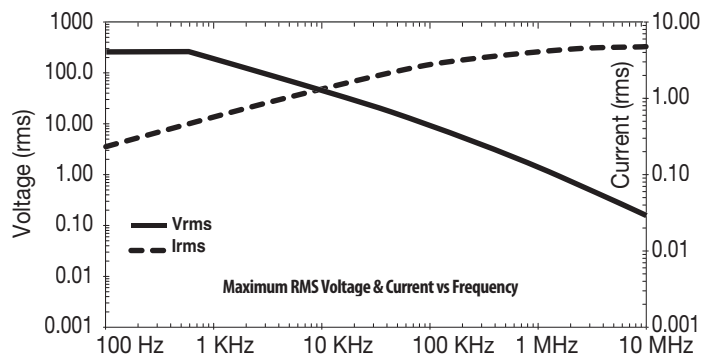
1.0 μ F 250 VDC RA6



5.0 μ F 100 VDC RA4

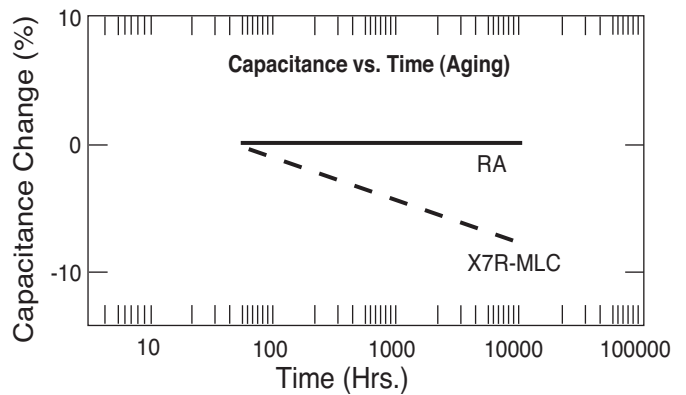
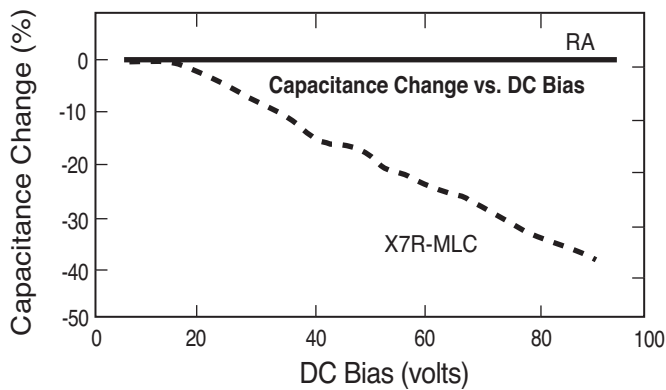
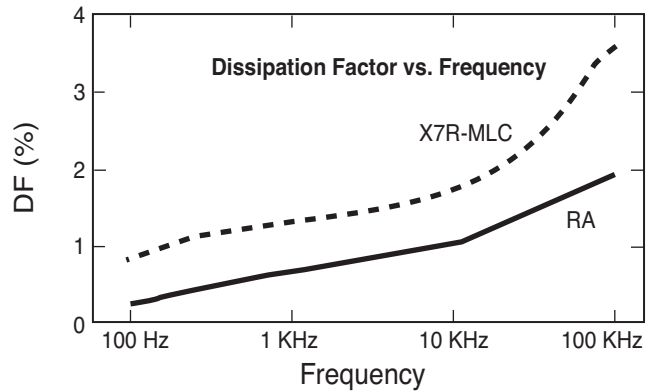
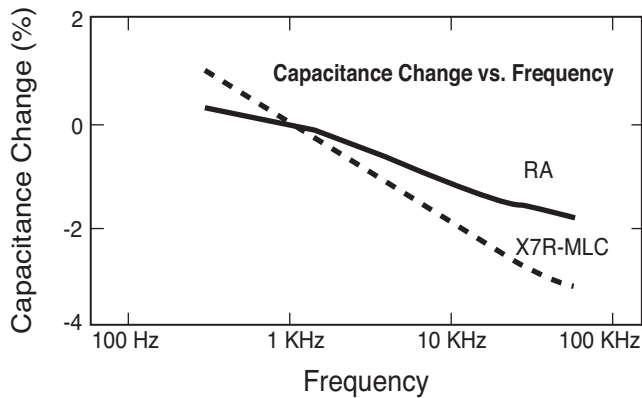
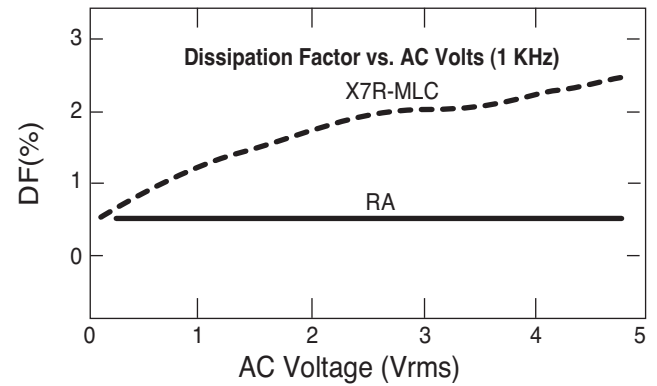
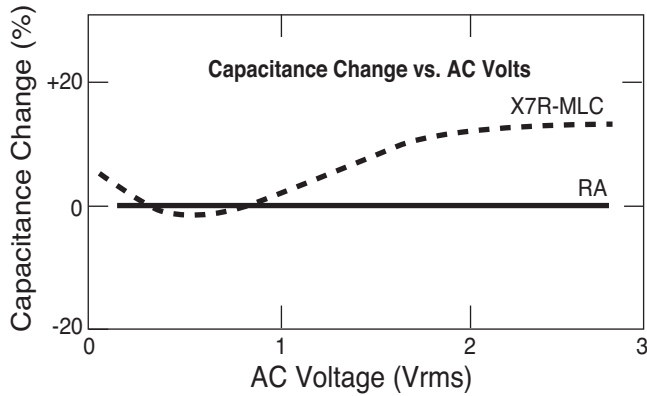
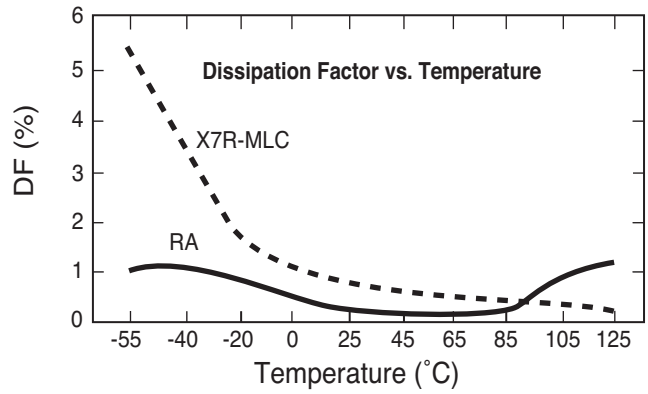
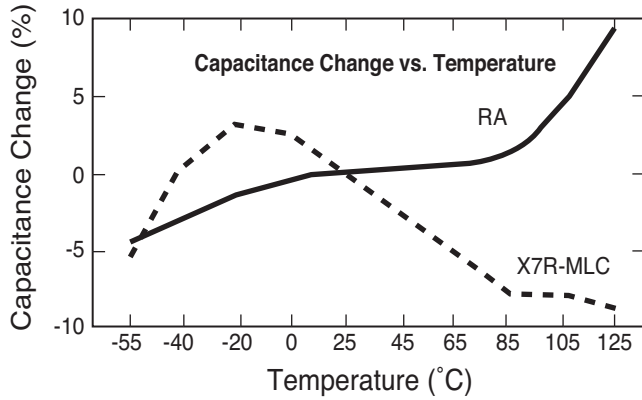


0.47 μ F 400 VDC RA6



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Typical Performance Curves



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Как с нами связаться

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