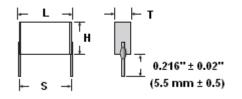
# Type RA Angstor<sup>®</sup> Radial PET Film Capacitors

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The RA style capacitor is constructed in an efficient rugged selfencased 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.

	suppression, EMI reduction and long-life applications.
	Highlights
	- Efficient size
	- Self healing - Low ESR/ESL
	- LOW ESR/ESL - High dv/dt
specifications	- Wave solderable
Capacitance Range (at 1 kHz)	0.1 to 10 μF
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)	≤1.0%
Insulation Resistance	≥1,000 M $\Omega$ x µF - Need not exceed 1,000 M $\Omega$
	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 $+85^{\circ}$ C / $85^{\circ}$ 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: ≤2.0%
Vibration	Mil Std 202 Method 204D
Solder Resistance	260°C, 5 sec.
	Capacitance change: $\leq 2.0\%$

#### **Outline Drawing**

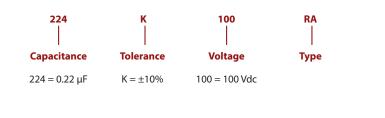


### **Type RA Angstor® Radial PET Film Capacitors** Ratings

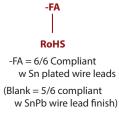
		Dimensions (in.)			Dimensions (mm)							
Catalog Part Number	Capacitance (uF)	L Max.	T Max.	H Max.	S ± 0.02	d	L Max.	T Max.	H Max.	S ± 0.5	d	Max. dv/dt (V/us)
				1	00 Vdc / 80	) Vac						•
224K100RA3-FA	0.22	0.350	0.155	0.280	0.295	0.025	8.9	3.9	7.1	7.5	0.6	75
474K100RA3-FA	0.47	0.350	0.180	0.305	0.295	0.025	8.9	4.6	7.7	7.5	0.6	65
105K100RA4-FA	1.0	0.450	0.175	0.285	0.394	0.025	11.4	4.4	7.2	10	0.6	35
225K100RA3-FA	2.2	0.350	0.250	0.350	0.295	0.025	8.9	6.3	8.9	7.5	0.6	25
225K100RA4-FA	2.2	0.450	0.205	0.285	0.394	0.025	11.4	5.2	7.2	10	0.6	25
335K100RA4-FA	3.3	0.450	0.250	0.350	0.394	0.025	11.4	6.3	8.9	10	0.6	25
405K100RA4-FA	4.0	0.450	0.200	0.380	0.394	0.032	11.4	5.1	9.7	10	0.8	20
505K100RA4-FA	5.0	0.450	0.220	0.480	0.394	0.032	11.4	5.6	12.2	10	0.8	20
106K100RA6-FA	10.0	0.650	0.260	0.460	0.591	0.032	16.5	6.6	11.7	15	0.8	13
				2!	50 Vdc / 16	0 Vac						•
104K250RA4-FA	0.10	0.450	0.160	0.255	0.394	0.025	11.4	4.1	6.5	10	0.6	100
224K250RA4-FA	0.22	0.450	0.190	0.305	0.394	0.025	11.4	4.8	7.7	10	0.6	75
334K250RA4-FA	0.33	0.450	0.250	0.330	0.394	0.025	11.4	6.3	8.4	10	0.6	75
474K250RA4-FA	0.47	0.450	0.210	0.305	0.394	0.025	11.4	5.3	7.7	10	0.6	55
474K250RA6-FA	0.47	0.650	0.230	0.340	0.591	0.032	16.5	5.8	8.6	15	0.8	50
105K250RA6-FA	1.0	0.650	0.240	0.340	0.591	0.032	16.5	6.1	8.6	15	0.8	35
				40	00 Vdc / 25	0 Vac						•
224K400RA6-FA	0.22	0.650	0.230	0.340	0.591	0.032	16.5	5.8	8.6	15	0.8	65
474K400RA6-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												
504K500RA6-FA	0.5	0.650	0.280	0.540	0.591	0.032	16.5	7.1	13.7	15	0.8	120

Part numbers highlighted in yellow are stocked

#### **Part Numbering System**

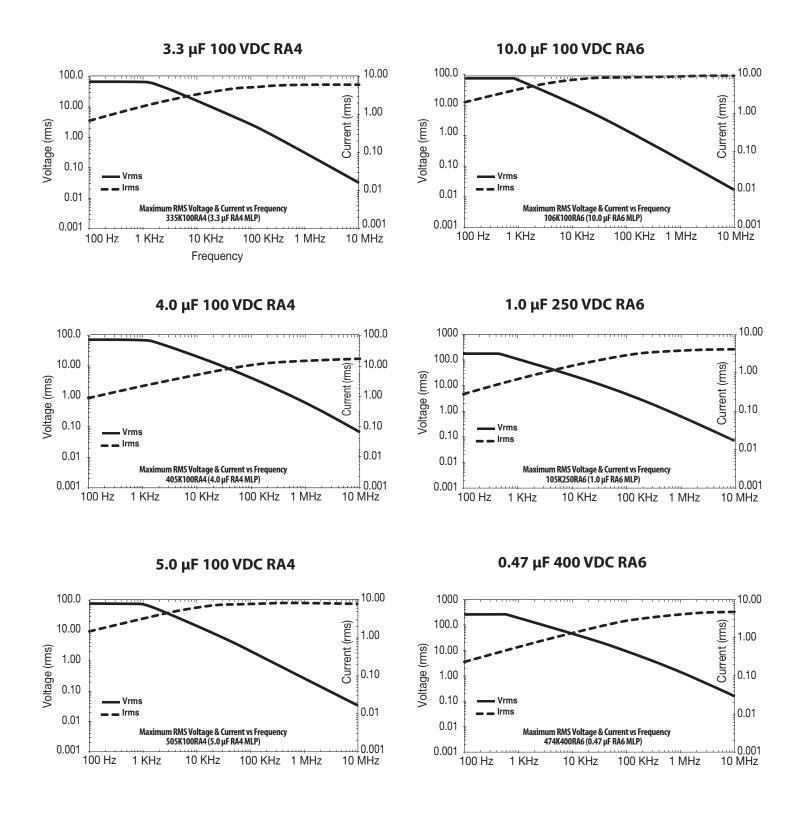


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Case Size	
3 = 0.3″=7.5 mm	
4 = 0.4"=10 mm	(
6 = 0.6″=15 mm	



## Type RA Angstor<sup>®</sup> Radial PET Film Capacitors

#### **Typical Performance Curves**



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