Type RA Angstor® 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.

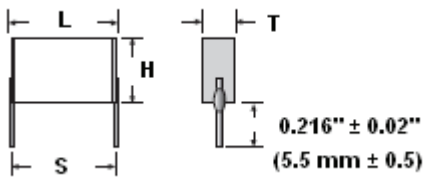
Highlights

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

Specifications

Capacitance Range (at 1 kHz)	0.1 to 10 µF
Capacitance Tolerance	Standard Tolerance ±10% (K), Optional ±5% (J) or ±20% (M)
Rated Voltage	100, 250, 400, 500 Vdc
Operating Temperature Range	–55 ºC to 125 ºC
Dissipation Factor (at 1 kHZ/25 ºC)	≤1.0%
Insulation Resistance	≥1,000 MΩ x µF - Need not exceed 1,000 MΩ 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: ≤ 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: ≤ 7.0% DF will meet the initial specification Insulation Resistance ≥ 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: ≤ 2.0%

Outline Drawing



Type RA Angstor® Radial PET Film Capacitors

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												
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
250 Vdc / 160 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
400 Vdc / 250 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

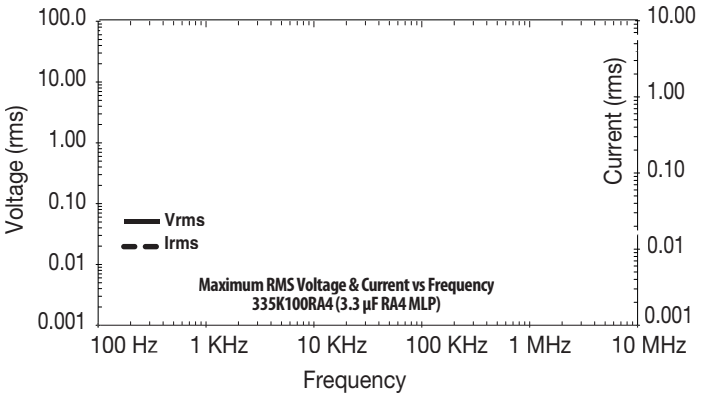
Part Numbering System

224	K	100	RA	3	-FA
Capacitance	**Tolerance**	**Voltage**	**Type**	**Case Size**	**RoHS**
224 = 0.22 µF	K = ±10%	100 = 100 Vdc		3 = 0.3"=7.5 mm 4 = 0.4"=10 mm 6 = 0.6"=15 mm	-FA = 6/6 Compliant w Sn plated wire leads (Blank = 5/6 compliant w SnPb wire lead finish)

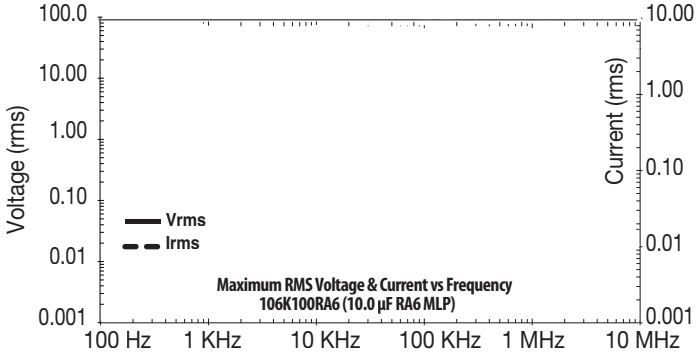
Type RA Angstor® Radial PET Film Capacitors

Typical Performance Curves

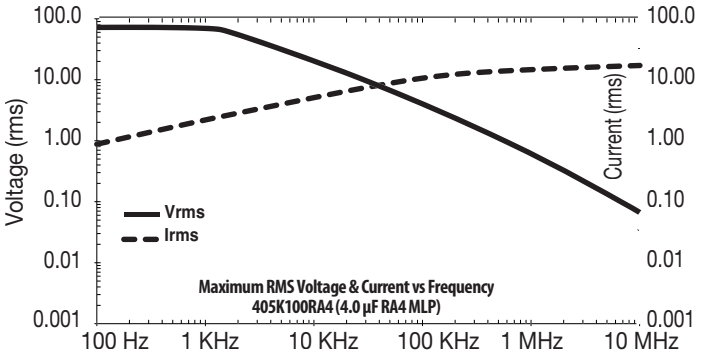
3.3 µF 100 VDC RA4



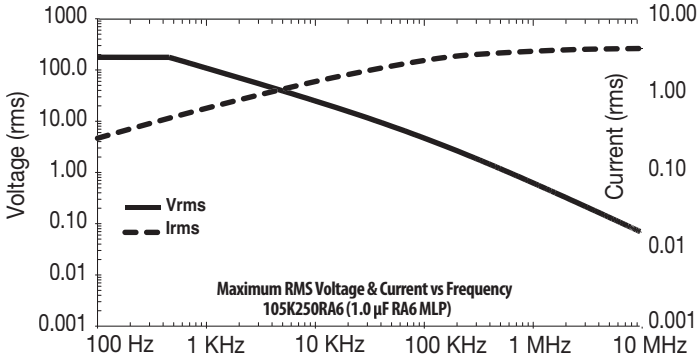
10.0 µF 100 VDC RA6



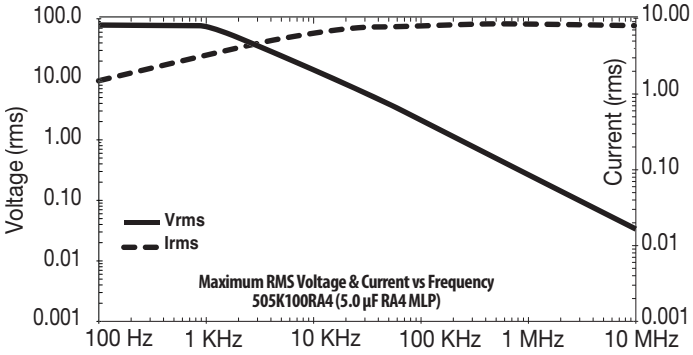
4.0 µF 100 VDC RA4



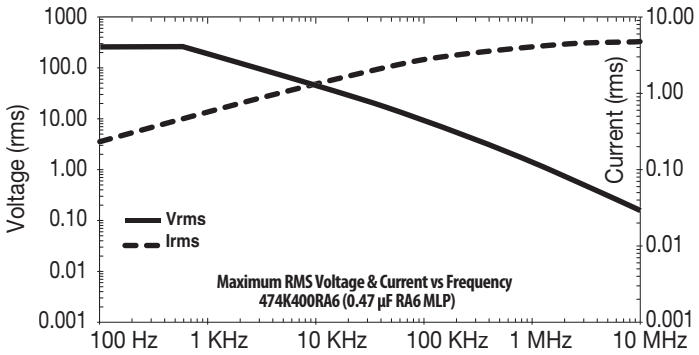
1.0 µF 250 VDC RA6



5.0 µF 100 VDC RA4



0.47 µF 400 VDC RA6



Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Film Capacitors ***category:***

Click to view products by Cornell Dubilier ***manufacturer:***

Other Similar products are found below :

F450KG153J250ALH0J 750-1018 FKP1-1000160010P15 FKP1-1500160010P15 82EC1100DQ50K MMWAF150KME PFR5101J100J11L16.5TA18 PME261JB5220KR19T0 A521HH333M035C QXJ2E474KTPT QXL2B333KTPT QXM2G104K DMT2P22 EEC2G505HQA406 B32520C6332K000 B32522C6104K000 B32523Q3155J B32676E6755K C3B2AD44400B20K 217-0716-001 KP1830-247/061-G SCD105K122A3-22 2N3155 F601BL225K063CL60A FKP1-2202KV5P15 FKS3-680040010P10 445450-1 B32523Q0475K000 46KR415050M1K 4BSNBX4100ZBFJ 4DCNAQ4450ZA0J MKP383510063JKP2T0 MKT 1813-368-015 MKT182022263473 4055292001 WMC08P22 WMF1S15 WMF4S68 EEC2E106HQA405 EEC2G805HQA415 82DC3100DQ50J 82DC4100AA60K 82EC2150DQ50K WMF4D68 WMF1D68 PHE841ED6150MR17T0 B25620B118K883 B25620B158K883 66MD2100CK7AK 97F8038