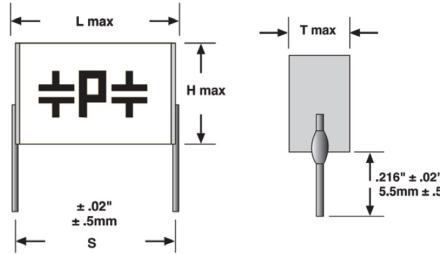


Angstor® Capacitor  
 Metallized Polyester Dielectric

# RA11

Stacked Metallized  
 Polyester Capacitor  
 With -55°C to +125°C  
 operating temperature range



## NEW

- High voltage ratings
- High ripple current ratings
- High capacitance density
- Ultra low ESR/ESL
- Lightweight <25% of equivalent MLCC
- Low losses at high frequency
- Self-healing
- Rugged construction
- Made in U.S.A.

### 1200 VDC/630 VAC

PF Code	Value $\mu$ F	L Max	T Max	H Max	S $\pm$ .02 [L.5]	Lead Diameter	Typical ESR 500kHz m $\Omega$	Max Ripple current 85C 500kHz [ARMS]	Lead Configuration	Part No.
474	0,47	1.15 [29.2]	0.53 [13.5]	1.05 [26.7]	1.1 [27.5]	0.032 [0.8]	33	14,2	4 pin DIP	474K1200RA11_

### 1000 VDC/500 VAC

804	0,8	1.15 [29.2]	0.35 [8.9]	1.05 [26.7]	1.1 [27.5]	0.32 [0.8]	28	5,8	4 pin DIP	804K1000RA11_
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Dimensions in inches, metric [mm] in parenthesis

Tolerance: K ( $\pm$ 10%) standard, J ( $\pm$ 5%) available

RoHS part number information

No suffix indicates RoHS-5 compliant standard part number. RoHS-5 product does not contain five of the RoHS banned materials (Hg, CrVI, Cd, PBB and PBDE) in levels exceeding the industry defined limits. Component lead wires are plated with Sn / Pb and match conventional SnPb 1 assembly requirements

For a RoHS-6 compliant part, add a -FA suffix. RoHS-6 product does not contain any of the six RoHS banned materials (Hg, CrVI, Cd, PBB, PBDE and Pb) in levels exceeding the industry defined limits. Component lead wires are plated with Sn.

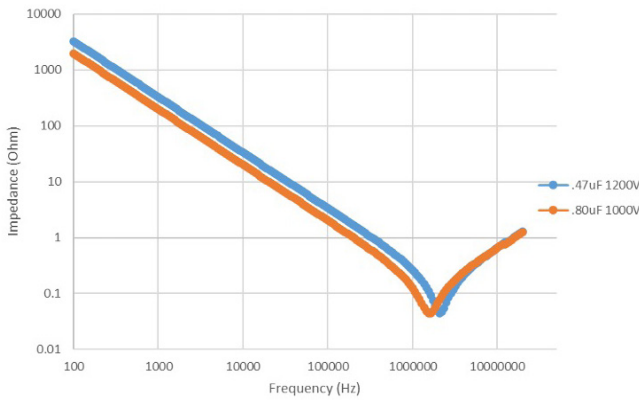
Electrical	Performance	Physical
<p><b>Tolerance:</b> Available in <math>\pm</math> 5%, 10% (standard), 20%</p> <p><b>Voltage Range:</b> 1000, 1200 VDC</p> <p><b>Dissipation Factor:</b> <math>\leq</math>1.0 % @ 25°C, 1KHz</p> <p><b>Insulation Resistance:</b> 1000<math>\Omega</math>F or 100G<math>\Omega</math>, whichever is less at rated voltage and 25°C</p> <p><b>Dielectric Strength:</b> 1.3 x RVDC, 2 seconds max.</p> <p><b>Self Inductance:</b> 2nh to 6nh typical</p> <p><b>Temperature Range:</b> -55°C to 125°C operating -55°C to 85°C @ rated DC voltage derate voltage 1.25% / °C above 85°C max operating temperature; 125°C</p>	<p><b>Accelerated DC Voltage Life Test:</b> 1,000 Hours, 85°C, 1.25 x Rated VDC <math>\Delta</math> C/C <math>\leq</math> 5% DF <math>\leq</math> 1.0%, 1KHz, 25°C IR <math>\geq</math> 1,000 Megohm x <math>\mu</math>F Need not exceed 1,000 Megohms</p> <p><b>Moisture Test:</b> 85°C / 85% RH / 21 days Applied Voltage: zero bias <math>\Delta</math> C/C <math>\leq</math> 7% DF <math>\leq</math> 1.0%, 1KHz, 25°C IR <math>\geq</math> 30% of initial limit</p> <p><b>Long Term Stability:</b> After 2 years storage, standard environment <math>\Delta</math> C/C <math>\leq</math> 2%</p>	<p><b>Vibration:</b> Mil Std 202 Method 204D</p> <p><b>Solder Resistance:</b> 260°C, 5 Sec. <math>\Delta</math> C/C <math>\leq</math> 2%</p> <p><b>Construction:</b> Non-inductively constructed with metallized polyester dielectric (polyethylene terephthalate). Parallel plate-multilayer polymer (MLP) design.</p> <p><b>Electrode:</b> Aluminum metallization</p> <p><b>Case:</b> Polyester tape wrap</p> <p><b>Marking:</b> Parts are continuously marked <b>+P+</b> and pf code. Capacitance, tolerance and working voltage are printed on container.</p> <p><b>Packaging:</b> Bulk Packaging Standard</p>

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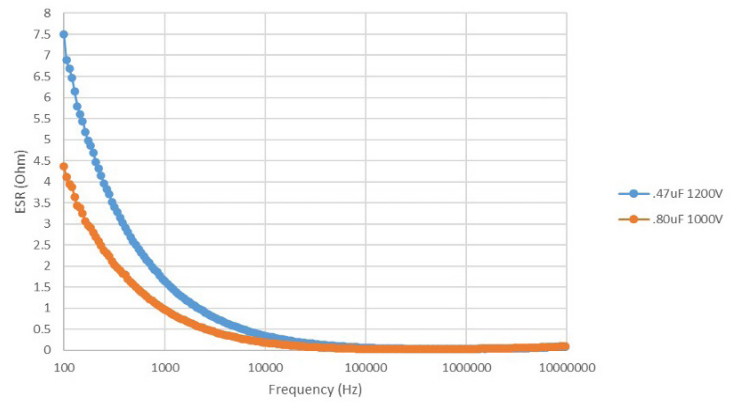
# RA11

## Electrical Characteristics 1000 VDC and 1200 VDC Ratings

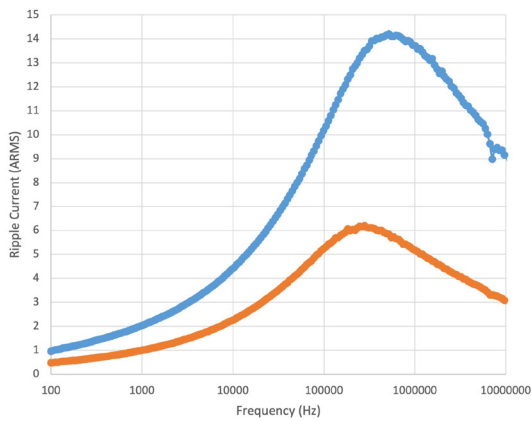
Impedance Vs Frequency



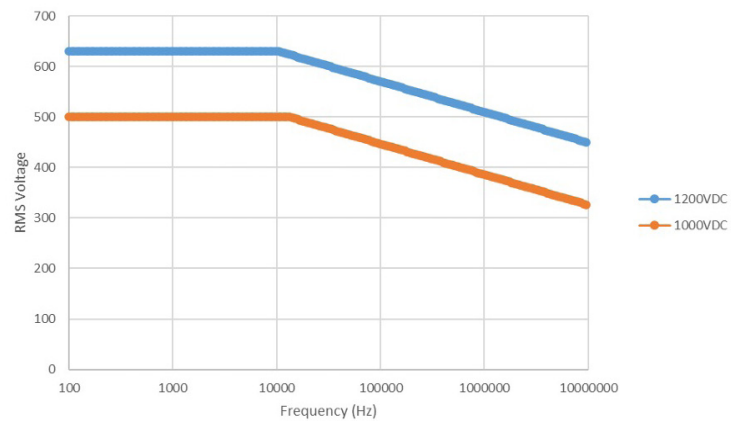
ESR Vs Frequency



Ripple Current limit Vs Frequency -55 to +85C



Maximum RMS Voltage vs frequency



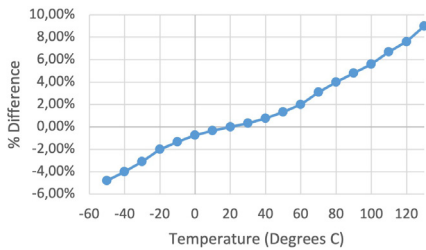
Test data is for 1200 VDC and 1000 VDC ratings only, and unless specified otherwise, all temperature and voltage tests were performed at 1kHz and all frequency tests performed at 25C°.

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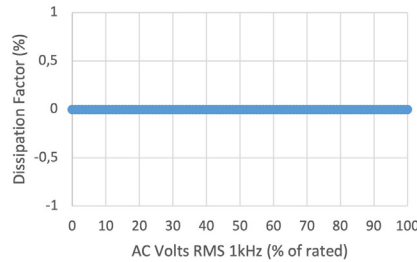
## RA11

## Electrical Characteristics

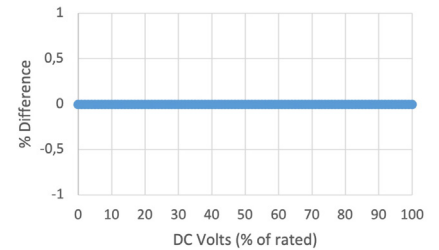
Capacitance Change (%) Vs. Temperature



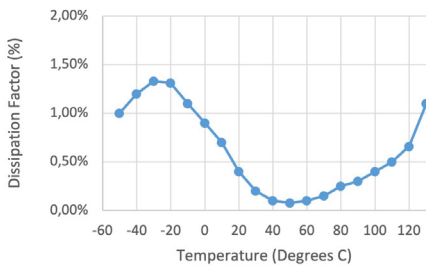
D.F. (%) Vs. AC Volts



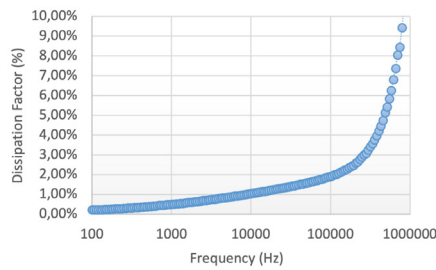
Capacitance Change (%) Vs. DC Bias Voltage



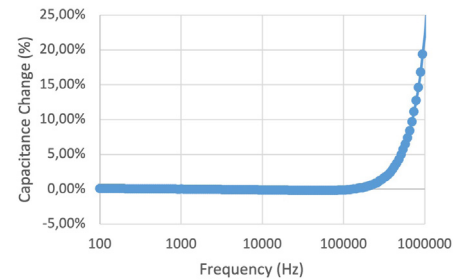
D.F. Vs. Temperature



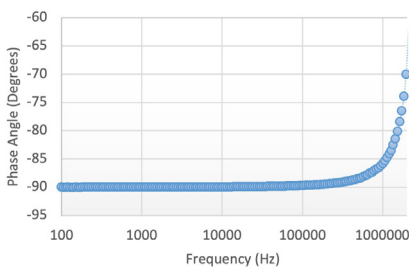
D.F. Vs. Frequency



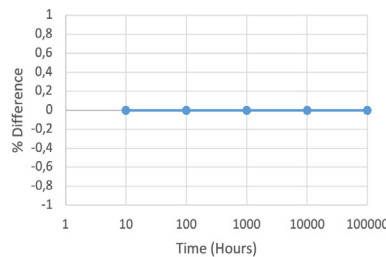
Capacitance (%) Vs. Frequency



Phase Angle vs. Frequency



Capacitance Change (%) Vs. Time



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