

## Power Ring Film Capacitor 425 $\mu$ F, 900 Vdc

The 700D407 Power Ring is a 900 Vdc, 425  $\mu$ F DC Link Capacitor with an ESR of 200 micro-Ohms at 20 kHz and an ESL of less than 5 nH.



### Electrical Specifications

**Part #:** 700D407

**Capacitance/Tolerance:** 425  $\mu$ F  $\pm$ 10%

**DC Voltage Rating:** 900 Vdc

**Dielectric/Construction:** Metallized polypropylene.  
Single section design

**Dielectric Withstand Voltage:** Units 100% tested at DC potential of 1125 Volts for two minutes at 25°C

**ESL:** Less than 5 nH when mounted on a suitable bus structure

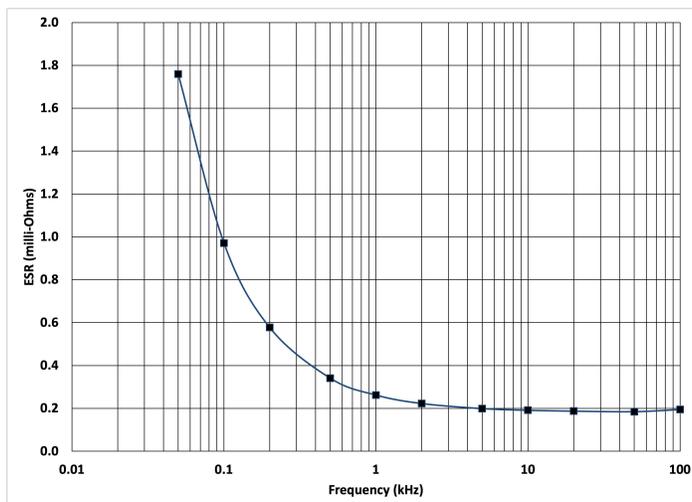
**Thermal Resistance:** 0.92°C/W (case side cooling only)  
0.44°C/W (case and bus side cooling only)

**Operating Temperature:** -40°C to +85°C at full DC voltage rating

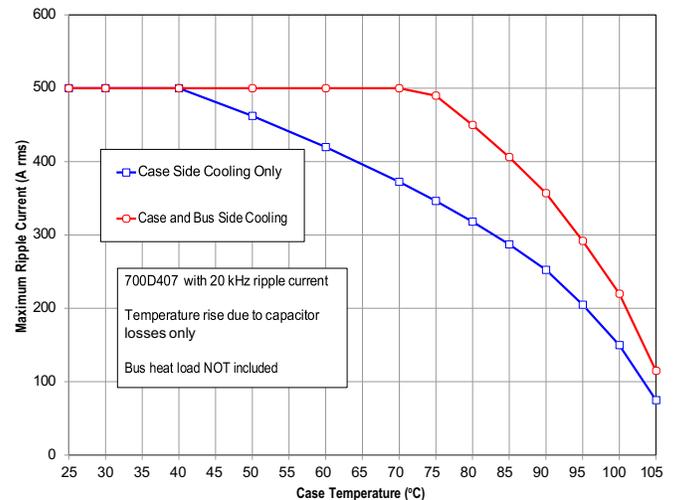
**Voltage, Temperature De-rating:** De-rate voltage linearly to 700 Volts from +85°C to +107°C, with respect to hotspot temperature

**System Fault Current Rating:** 10,000 Amps maximum (external to the capacitor)

### Typical ESR vs. Frequency:



### RMS Current Rating:



### Mechanical Specifications

<b>Dimensions:</b>	See layout drawing for details	<b>Marking:</b> APCS	company identification
<b>Terminals:</b>	Tin plated copper, 0.032" thick	700D407	Unique part number
<b>Encapsulation:</b>	Molded polymeric case, potted with RTV silicone	425 $\mu$ F $\pm$ 10%	Capacitance value and tolerance
		900 Vdc	DC voltage rating
		yyww-lot#-unit	Serial number (date code, lot number, unit number)

### Layout Details:

Contact Advanced Conversion to discuss your specific requirements.

**Notes:**

- All Hole Positions Inspected
- All Dimensions Inspected Unless Marked as Reference

Revisions					
REV.	DESCRIPTION	CHG BY	CHK BY	APR BY	DATE
01	Initial Release	-	-	-	-
02	Standardized Layout View	AGH	MGS	MSB	12/14/2010

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NON-TOLERANCED DIMENSIONS ARE BASIC: UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES		
GEOMETRIC TOLERANCING PER: Y14.5-2009		
DRAWN	MGS	1/28/2010
CHECKED	DMB	11/12/2010
ENG APPR.	MSB	11/12/2010
FINISH		

**Advanced Conversion**  
 an ETI company  
 81 PARKER ROAD, BARRE, VT 05641 USA  
 Tel: 802.661.3450 ext. 104

**TITLE**  
 Power Ring Capacitor,  
 425 $\mu$ F, 900VDC

DWG. NO.	700D407LV		
DO NOT SCALE DRAWING	SIZE A	REV 02	SHEET 1 OF 1

#700D407-03/21