

## Power Ring Film Capacitor 140 $\mu$ F, 1500 Vdc

The 700D411 Power Ring is a 1500 Vdc, 140  $\mu$ F DC Link Capacitor with an ESR of 290 micro-Ohms at 20 kHz and an ESL of less than 5 nH.



### Electrical Specifications

**Part #:** 700D411

**Capacitance/Tolerance:** 140  $\mu$ F  $\pm$ 10%

**DC Voltage Rating:** 1500 Vdc

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

**Dielectric Withstand Voltage:** Units 100% tested at DC potential of 1875 Volts for two minutes at 25°C

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

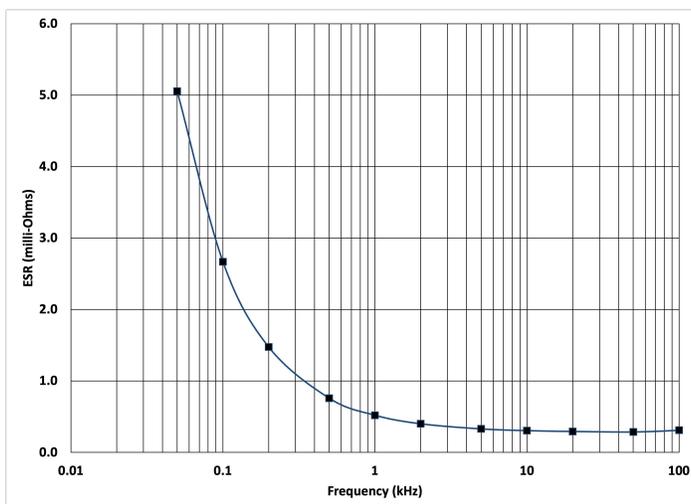
**Thermal Resistance:** 0.92°C/W (case side cooling only)  
0.44°C/W (case and bus side cooling only)

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

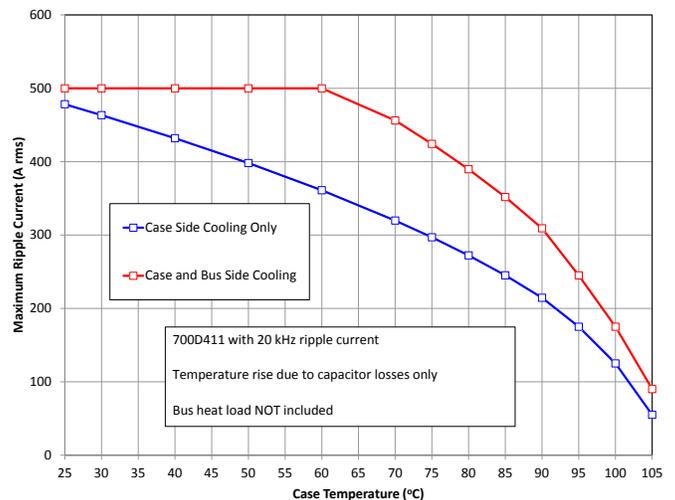
**Voltage, Temperature De-rating:** De-rate voltage linearly to 1300 Volts from +85°C to +107°C, with respect to hotspot temperature

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

### Typical ESR vs. Frequency:



### RMS Current Rating:



Advanced Conversion reserves the right to amend design data

**At the Leading Edge of Film Capacitor Technology**

### Mechanical Specifications

**Dimensions:** See layout drawing for details  
**Terminals:** Tin plated copper, 0.032" thick  
**Encapsulation:** Molded polymeric case, potted with RTV silicone

**Marking:** APCS company identification  
 700D411 Unique part number  
 140  $\mu$ F  $\pm$ 10% Capacitance value and tolerance  
 1500 Vdc DC voltage rating  
 yyyy-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

$\phi$  6.868 Bolt Circle

7X 45.0°

22.5°

$\phi$  8.465

$\phi$  9.252 Bolt Circle

16X M5X0.8 - 6H THRU  
28 in-lbs MAX Torque  
 $\oplus \phi .020$  | A | B | C

$\phi$  8.746 Bolt Circle

4X  $\phi$  .197  $\pm$  .005 THRU  
Accepts 1/4" Plastiite Screw  
40 in-lbs MAX Torque  
 $\oplus \phi .020$  (M) | A | B | C

DETAIL A  
SCALE 1 : 1

(.663)

(1.000)

(.500)

(.280)

$\phi$  .040  
16 Surfaces

(.260)

(2.154)

**PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF  
 ADVANCED CONVERSION. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT  
 THE WRITTEN PERMISSION OF ADVANCED CONVERSION IS PROHIBITED. 02

NON-TOLERANCED DIMENSIONS ARE BASIC  
 $\triangle .030$  | A | B | C  
 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

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

**TITLE**  
 Power Ring Capacitor,  
 140 $\mu$ F, 1500VDC

DWG. NO.  
 700D411LV

MATERIAL	FINISH	DO NOT SCALE DRAWING	SIZE A	REV 02	SHEET 1 OF 1
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#700D411-03/21

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