

Power Ring Film Capacitor 500 μF , 700 Vdc

The 700D599 Power Ring is a 700 Vdc, 500 μF DC Link Capacitor with an ESR of 410 micro-Ohms at 20 kHz and an ESL of less than 5 nH.



Electrical Specifications

Part #: 700D599

Capacitance/Tolerance: 500 μF $\pm 10\%$

DC Voltage Rating: 700 Vdc

Dielectric/Construction: Metallized polypropylene.
Single section design

Dielectric Withstand Voltage: Units 100% tested at DC potential of 950 Volts for two minutes at 25°C

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

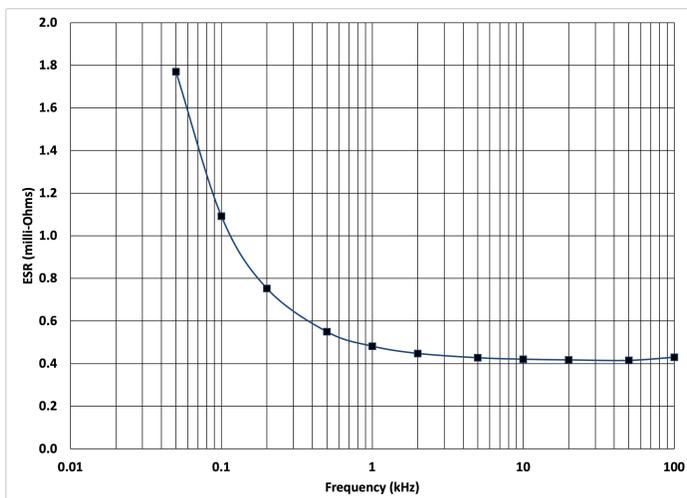
Thermal Resistance: 1.52°C/W (case side cooling only)
0.67°C/W (case and bus side cooling only)

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

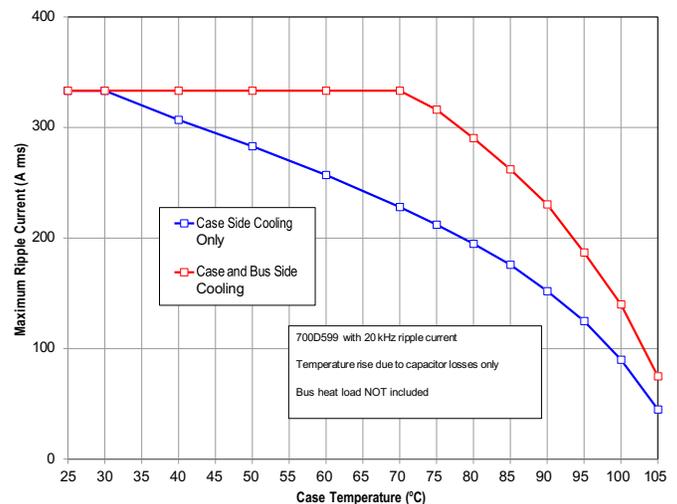
Voltage, Temperature De-rating: De-rate voltage linearly to 500 Volts from +85°C to +107°C, with respect to hotspot temperature

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

Typical ESR vs. Frequency:



RMS Current Rating:



Mechanical Specifications

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
 700D599 Unique part number
 500 μ F \pm 10% Capacitance value and tolerance
 700 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.

Revisions						
REV.	DESCRIPTION	CHG BY	CHK BY	APR BY	DATE	
01	Initial Release	-	-	-	-	

Notes:

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

ϕ 4.618 Bolt Circle

ϕ 6.264

ϕ 7.051 Bolt Circle

7X 45.0°

22.5°

16X M5X0.8 - 6H THRU
28 in-lbs MAX Torque
 ϕ .020 A B C

ϕ 6.498 Bolt Circle

4X ϕ .197 \pm .005 THRU
Accepts 1/4" Plastite Screw
40 in-lbs MAX Torque
 ϕ .020 A B C

.040
16 Surfaces

(.263)

(2.157)

DETAIL A
SCALE 1 : 1

(.750)

(.375)

(.280)

(.663)

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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	AGH	2/1/2013	
CHECKED	MGS	2/1/2013	
ENG APPR.	MSB	2/1/2013	
MATERIAL	FINISH		

Advanced Conversion
an ETI company

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TITLE
Power Ring Capacitor,
500 μ F, 700VDC

DWG. NO.
700D599LV

DO NOT SCALE DRAWING	SIZE A	REV 01	SHEET 1 OF 1
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#700D599-03/21

Advanced Conversion reserves the right to amend design data