

Power Ring Film Capacitor

700D651

700D652

700D718

700D719

700D725

This part series features a single metalized polypropylene winding (single section) that is encapsulated in a case. This part series has terminal feet that face inward for a reduced footprint.



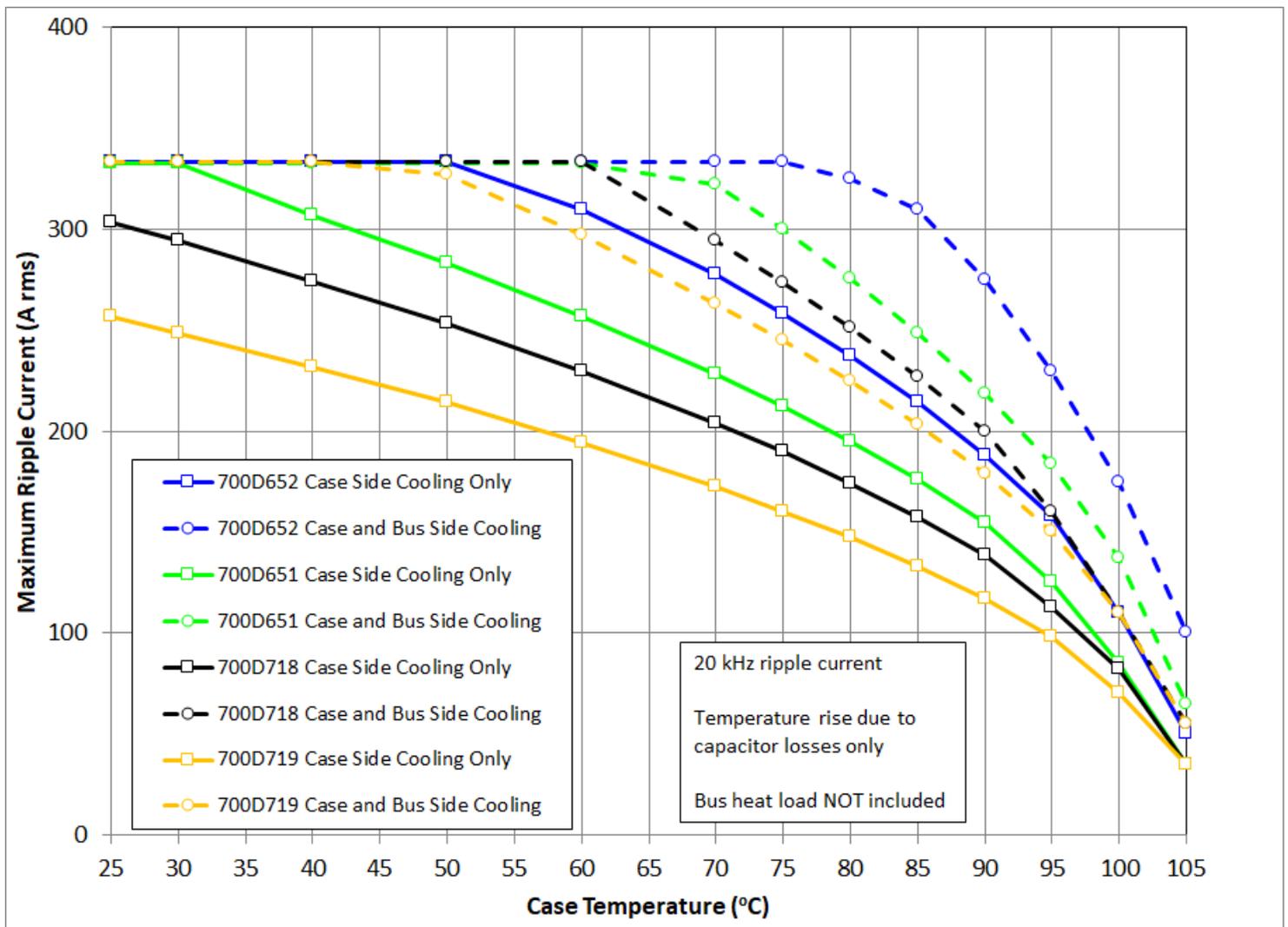
Electrical/Thermal Specifications:

PN	700D652	700D651	700D718	700D725	700D719	Notes
CAP μ F ($\pm 10\%$)	500	215	115	215	75	
DC Voltage Rating	600	900	1200	1200	1500	
System Fault current rating (Amps)	10,000	6,500	5,000	6,500	4,000	
Voltage, Temperature De-Rating (XXX), Volts	400	600	800	800	1000	De-rate voltage linearly to De-rating: XXX Volts from +85°C to +107°C, with respect to hotspot temperature
Dielectric Withstand Voltage	Units 100% tested at DC potential of 120% of rated voltage for two minutes at 25°C					
ESR (Micro-Ohms)	250	350	500	625	570	At 20kHz and an ESL of less than 5nH
ESL	Less than 5 nH when mounted on a suitable bus structure					
Operating Temperature	-40°C to +85°C at full DC voltage rating					

Mechanical Mounting and Additional Thermal Notes:

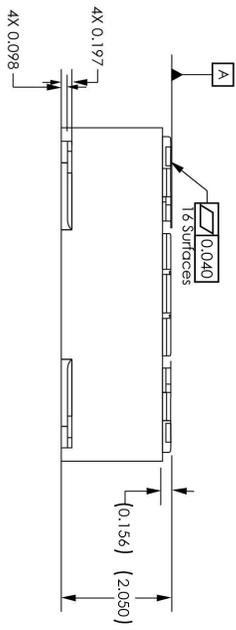
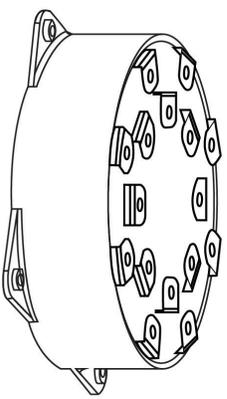
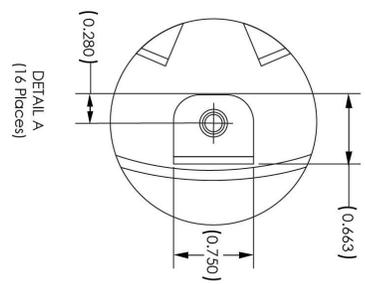
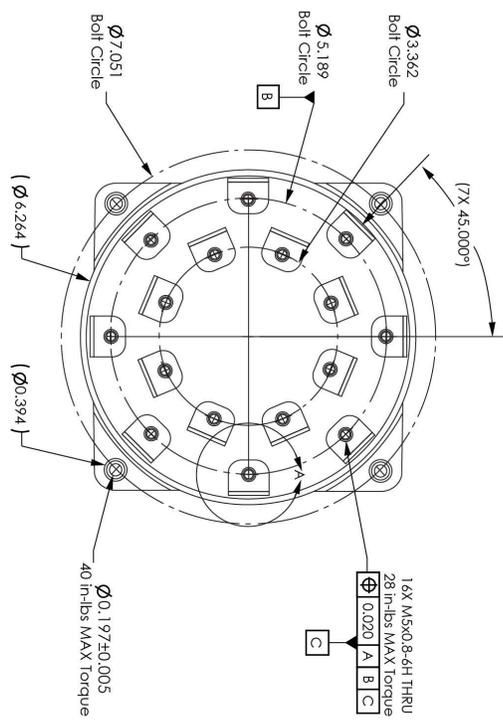
This capacitor is optimized for extremely low self inductance when connected to a suitable laminar bus structure. When so connected, the capacitor is very rigidly attached to such a structure and thus does not necessarily need to be mounted to a chassis. However, the capacitor case can be attached to an application surface/heat sink, etc. if desired. When so mounted, the capacitor can be part of the bus structure support. Use of thermal interface compound between the capacitor case and application surface/heat sink will assist with removal of capacitor and bus heat. Note that the capacitor internal heating is VERY small, and other bus structure heat sources are very likely significantly higher than the heat added to the bus by the capacitor. Capacitor dissipation is approximately 2.5W at 100Arms, from 1-100KHz. It is highly recommended to use infrared thermal imaging from a system cold start to determine the location and relative magnitude of thermal input to the bus. The capacitor may well function as a thermal conduit for bus structure heat, and it will be very possible that the capacitor internal hot spot is less than the terminal temperature. Thermal contour maps are available for some representative conditions.

RMS Current Rating:



Revisions

REV.	DESCRIPTION	CHG BY	CHK BY	APP BY	DATE
01	Initial Release	-	-	-	-



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NON-TOLERANCED DIMENSIONS ARE BASIC
 UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS ARE IN INCHES

0.030 A B C
 GEOMETRIC TOLERANCING PER Y14.5-2009

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Advanced Conversion
 TITLE: Inward Facing Feet
 DWG. NO.:
 SHEET 1 OF 1
 DRAWING SCALE:

DRAWN: []
 CHECKED: []
 ENG. APPR: []
 DATE: 12/12/2022