

Power Ring Film Capacitor 500 μ F, 500 Vdc

The 700A50795-186 Power Ring assembly is a 500 μ F, 500 Vdc dual-winding DC Link Capacitor integrated with a laminar bus. The assembly has an ESR of 410 $\mu\Omega$ at 20 kHz, an ESL less than 8 nH, and a life of more than 10,000 hours at a typical drive cycle for an 80-120 kW inverter.



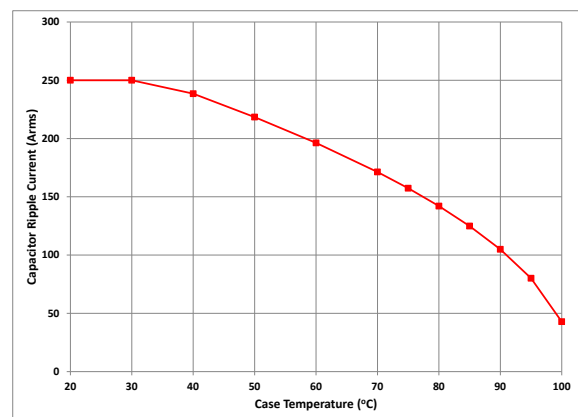
Electrical Specifications

Part #:	700A50795-186
Capacitance/Tolerance:	500 μ F \pm 10%
DC Voltage Rating:	500 Vdc
Dielectric:	Metallized polypropylene film
ESL at IGBT Terminals:	Less than 8 nH
Typical ESR vs. Frequency:	410 $\mu\Omega$ at 20 kHz
Continuous DC Voltage Rating:	500 Vdc up to 85°C (de-rate linearly from 500 Vdc to 300 Vdc from 85°C to 105°C)
Dielectric Withstand Test Voltage:	Units 100% tested at DC voltage of 600 Vdc for 2 minutes at 25°C
Operating Temperature:	-40°C to +105°C
Maximum Peak Current:	250 Arms (not to exceed 2 minutes and 85°C hotspot at 500 Vdc)

Mechanical Specifications

Dimensions:	See layout drawing for details										
Bus Structure:	Tin plated copper, 0.060" (1.50 mm) thick										
Packaging:	Polycarbonate enclosure encapsulated with RTV										
IGBT Connection Type:	Thru-hole connections for Infineon HP Drive™										
Construction:	Dual windings integrated to a laminar bus										
Marking:	<table border="0"> <tr> <td>APCS</td> <td>company identification</td> </tr> <tr> <td>700A186</td> <td>"short form" part number</td> </tr> <tr> <td>500 μF \pm10%</td> <td>Capacitance value and tolerance</td> </tr> <tr> <td>500 Vdc</td> <td>DC voltage rating</td> </tr> <tr> <td>yyww-lot#-unit</td> <td>Serial number (date code, lot number, unit number)</td> </tr> </table>	APCS	company identification	700A186	"short form" part number	500 μ F \pm 10%	Capacitance value and tolerance	500 Vdc	DC voltage rating	yyww-lot#-unit	Serial number (date code, lot number, unit number)
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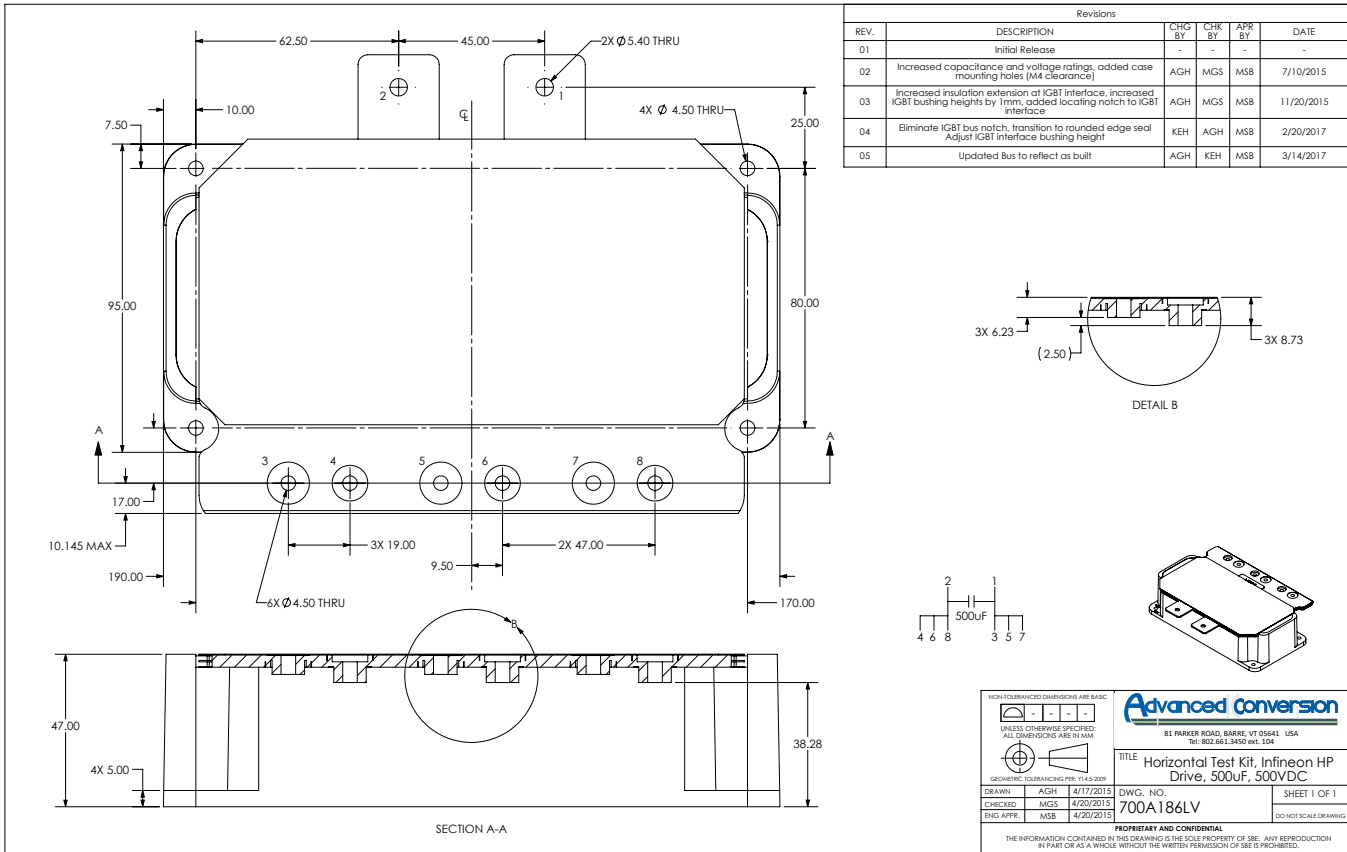
Rating Curve:



Ripple current versus case temperature for 10,000 hour life with continuous operation at 450V.

Advanced Conversion reserves the right to amend design data

Layout Details:



Contact Advanced Power Conversion Solutions Inc. to discuss your specific requirements.

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