Power Ring Film Capacitors

Part 700A50795-186

Power Ring Film Capacitor 500 μF, 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 µF ±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 500 Vdc up to 85°C (de-rate

Rating: linearly from 500 Vdc to

300 Vdc from 85°C to 105°C)

Dieletric Withstand Units 100% tested at DC voltage

Test 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:

APCS company identification 700A186 "short form" part number 500 μ F ±10% Capacitance value and

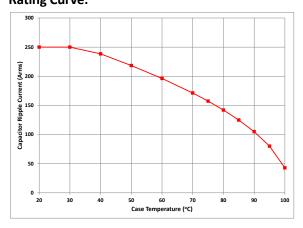
tolerance

500 Vdc DC voltage rating

yyww-lot#-unit Serial number (date code,

lot number, unit number)

Rating Curve:

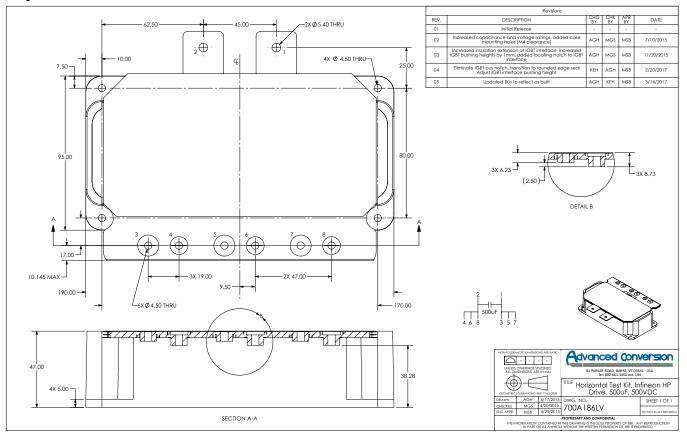


Ripple current versus case temperature for 10,000 hour life with continuous operation at 450V.

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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telephone: 802.661.3450