Power Ring Film Capacitors

Part 700A50795-205

Power Ring Film Capacitor500 μF, 500 Vdc

The 700A50795-205 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 12 nH, and a life of more than 10,000 hours at a typical drive cycle for an 80-120 kW inverter.

Electrical Specifications

Part #: 700A50795-205

Capacitance/Tolerance: 500 μF ±10%

Dielectric: Metallized

polypropylene film

ESL at IGBT Terminals: Less than 12 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)

Maximum DC 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: Tin plated copper, 1.50 mm

thick

Encapsulation: Un-encapsulated

IGBT Connection Type: Thru-hole connections for

Infineon HP Drive™

Construction: Dual windings integrated to a

laminar bus

Marking:

APCS APCS company identification 700A205 "short form" part number

500 μF ±10% Capacitance value and

tolerance

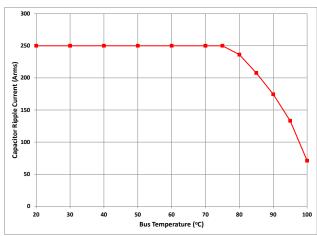
500 Vdc DC voltage rating

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

lot number, unit number)

Rating Curve:

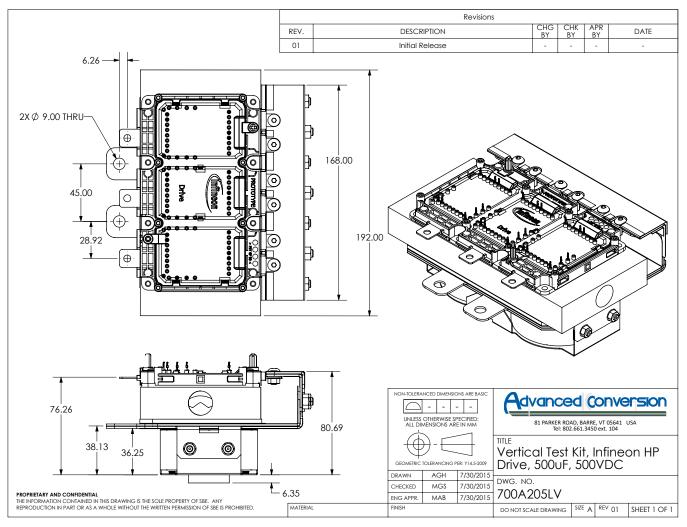
Ripple current versus bus temperature for 10,000 hour life with continuous operation at 450V.



Advanced Conversion reserves the right to amend design data



Layout Details:



Note: HP Drive Module and Cooling Plate Not Included Contact Advanced Power Conversion Solutions Inc. to discuss your specific requirements.



telephone: 802.661.3450