

PRELIMINARY VERSION

**Integrated Capacitor/bus assembly
550 μ F, 500 Vdc with DuPont Teijin
PEN HV™ film for operation to 125°C**

The 906A55795-107 Power Ring assembly is a 550 μ F, 500 Vdc dual-winding DC Link Capacitor integrated with a laminar bus. The assembly has an ESR of 635 $\mu\Omega$ at 20kHz, an ESL of less than 8nH and a life of more than 10,000 hours at a typical drive cycle for an 80-120 kW inverter.



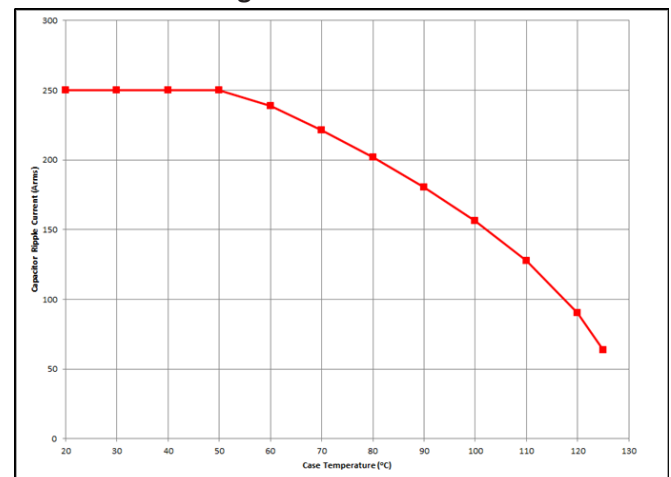
Electrical Specifications

Part #:	906A55795-107
Capacitance/Tolerance:	550 μ F \pm 10%
Dielectric:	Metallized high temp film
ESL at IGBT Terminals:	Less than 8 nH
Continuous DC Voltage:	500 Vdc up to 125°C (derate linearly from 500 Vdc to 300 Vdc from 125°C to 150°C hotspot)
Typical ESR vs. Frequency:	635 $\mu\Omega$ at 20 kHz
Maximum DC Voltage:	Units 100% tested at DC voltage of 625 Vdc for 2 minutes at 25°C
Operating Temperature:	-40°C to +125°C
Maximum Peak Current:	250 Arms (not to exceed 2 minutes and 130°C hotspot at 500 Vdc)
Operating Ranges (Typical Drive Cycle):	450 V < Vdc < 550 V 75Arms < I _{ripple} < 150Arms 50°C < T _{coolant} < 125°C

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 HYBRIDPACK™ Drive Module
Construction:	Dual windings integrated to a laminar bus

RMS Current Rating

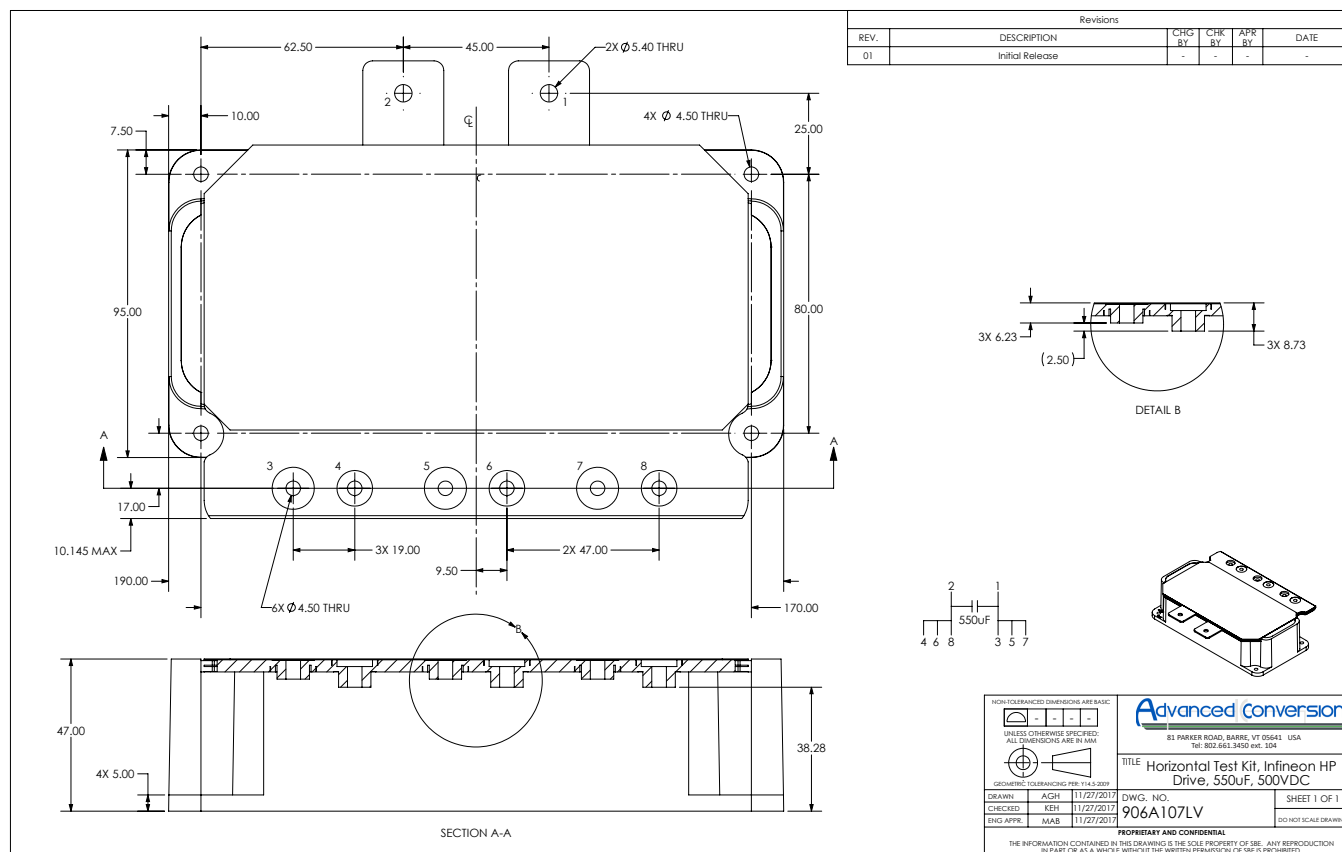


Ripple current versus average case temperature to achieve 10,000 hour life for continuous operation.

Marking:

APCS company identification
 906A107 "short form" part number
 550 μ F \pm 10% Capacitance value and tolerance
 500 Vdc DC voltage rating
 yyww-lot#-unit Serial number (date code, lot number, unit number)

Layout Details:



Contact Advanced Conversion to discuss your specific requirements.



#906A107-03/21

Advanced Conversion reserves the right to amend design data

Advanced Power Conversion Solutions Inc.
 81 Parker Road, Barre, Vermont 05641 USA

telephone: 802.661.3450

web: advanced-conversion.com

e-mail: info@advanced-conversion.com