

**PRELIMINARY VERSION**

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

*The 906A55795-107 Power Ring assembly is a 550  $\mu$ 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.*



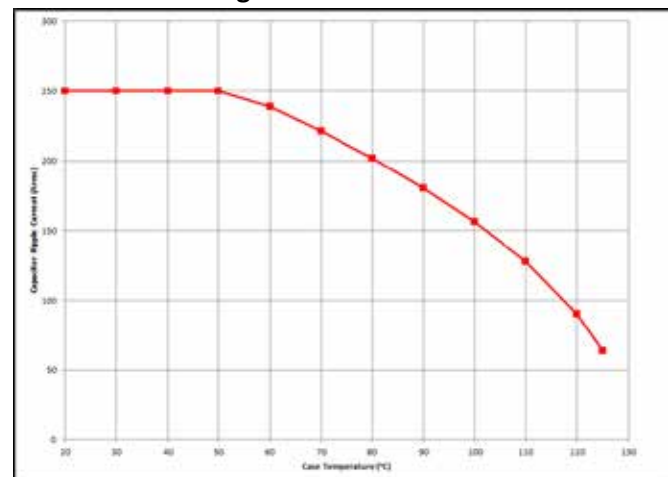
**Electrical Specifications**

- Part #:** 906A55795-107
- Capacitance/Tolerance:** 550  $\mu$ 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<sub>ripple</sub> < 150Arms  
50°C < T<sub>coolant</sub> < 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**

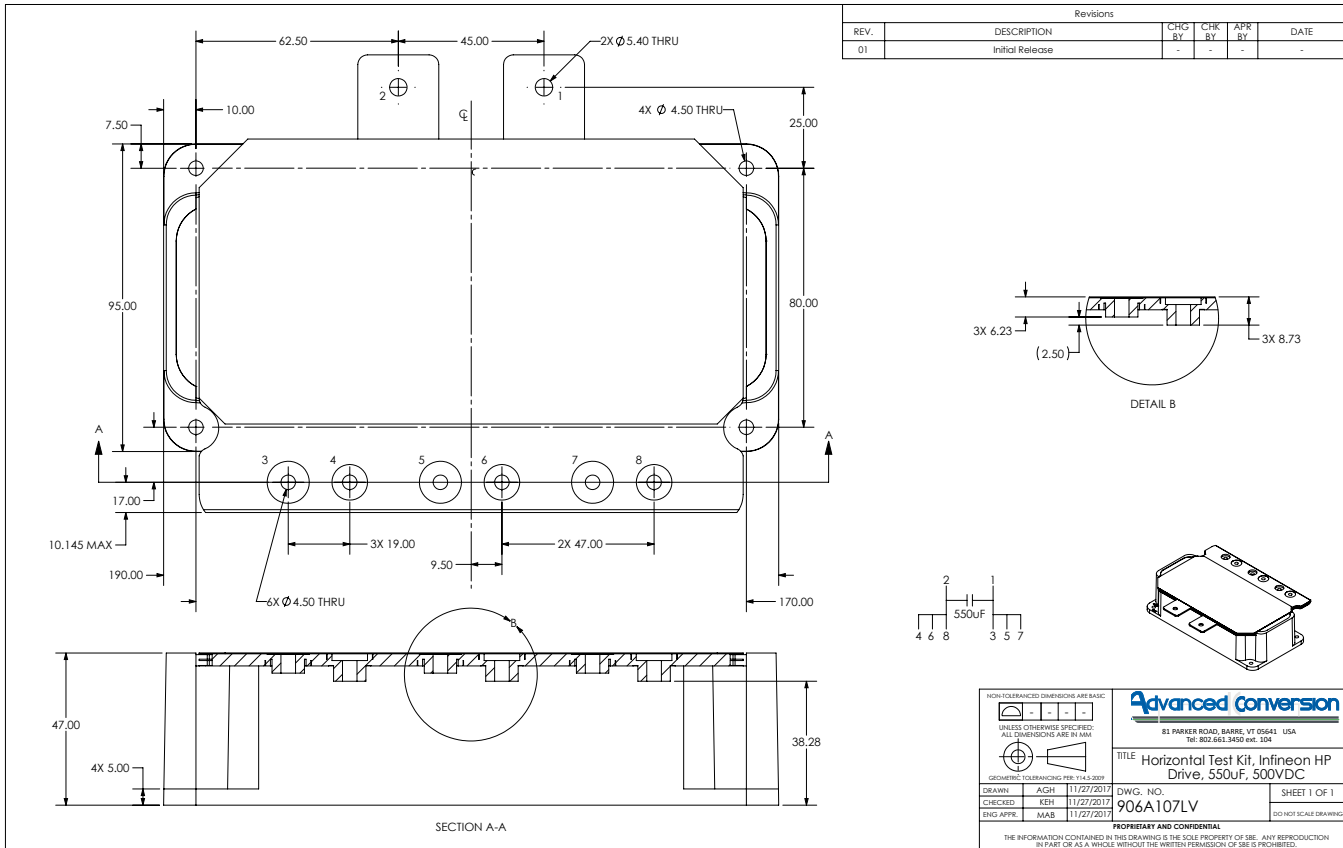


Ripple current versus average case temperature to achieve 10,000 hour life for continuous operation.

### Marking:

APCS	company identification
906A107	"short form" part number
550 $\mu$ 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