

PRELIMINARY VERSION

**Integrated Capacitor/bus assembly
135 μF, 900 Vdc with DuPont Teijin
PEN HV™ film for operation to 125°C**

The 906A13799-104 Power Ring assembly is a 135 μF, 900 Vdc dual-winding DC Link Capacitor integrated with a laminar bus. The assembly has an ESR of 850 μΩ 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.



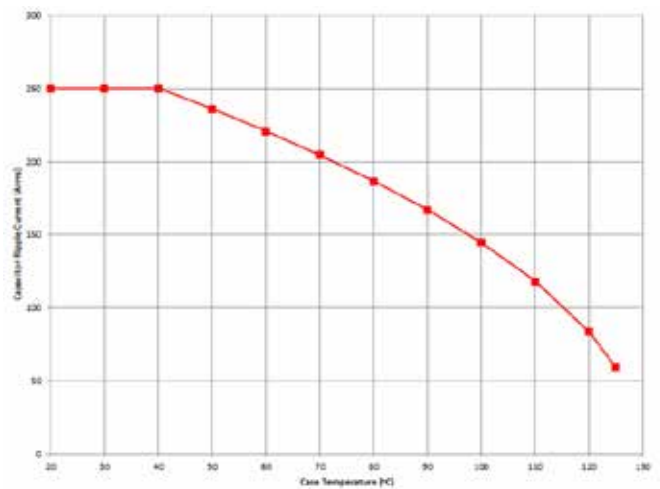
Electrical Specifications

- Part #:** 906A13799-104
- Capacitance/Tolerance:** 135 μF ±10%
- Dielectric:** Metallized high temp film
- ESL at IGBT Terminals:** Less than 8 nH
- Continuous DC Voltage:** 900 Vdc up to 125°C (derate linearly from 900 Vdc to 540 Vdc from 125°C to 150°C hotspot)
- Typical ESR vs. Frequency:** 850 μΩ at 20 kHz
- Maximum DC Voltage:** Units 100% tested at DC voltage of 1,125 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 900 Vdc)
- Operating Ranges (Typical Drive Cycle):** 850 V < Vdc < 950 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

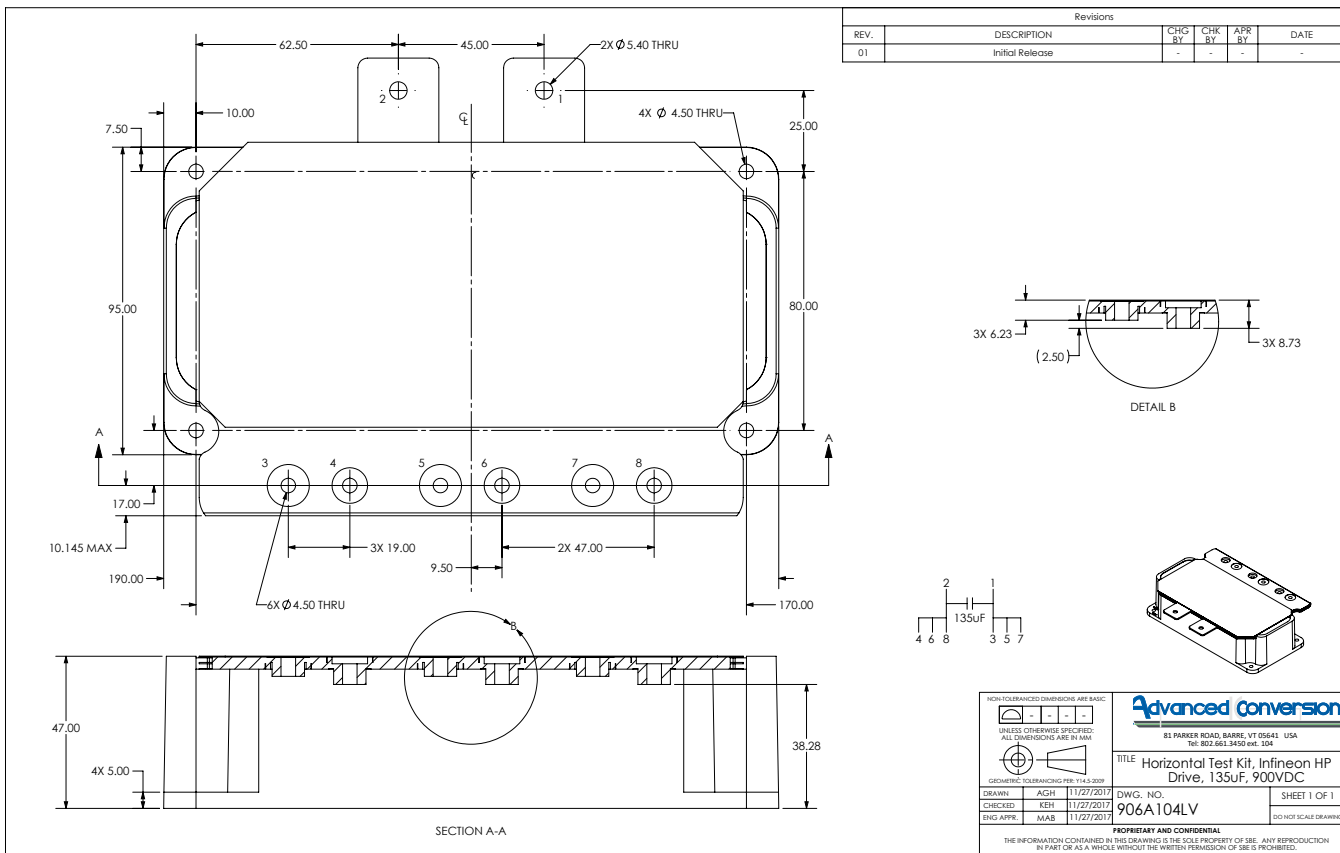


Ripple current versus average case temperature to achieve 10,000 hour life for continuous operation.

Marking:

APCS company identification
 906A104 "short form" part number
 135 μ F \pm 10% Capacitance value and tolerance
 900 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.

Advanced Conversion reserves the right to amend design data