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.

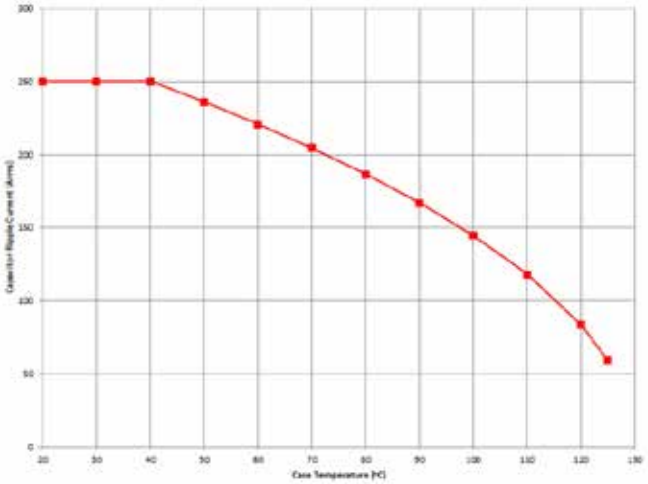
Electrical Specifications

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

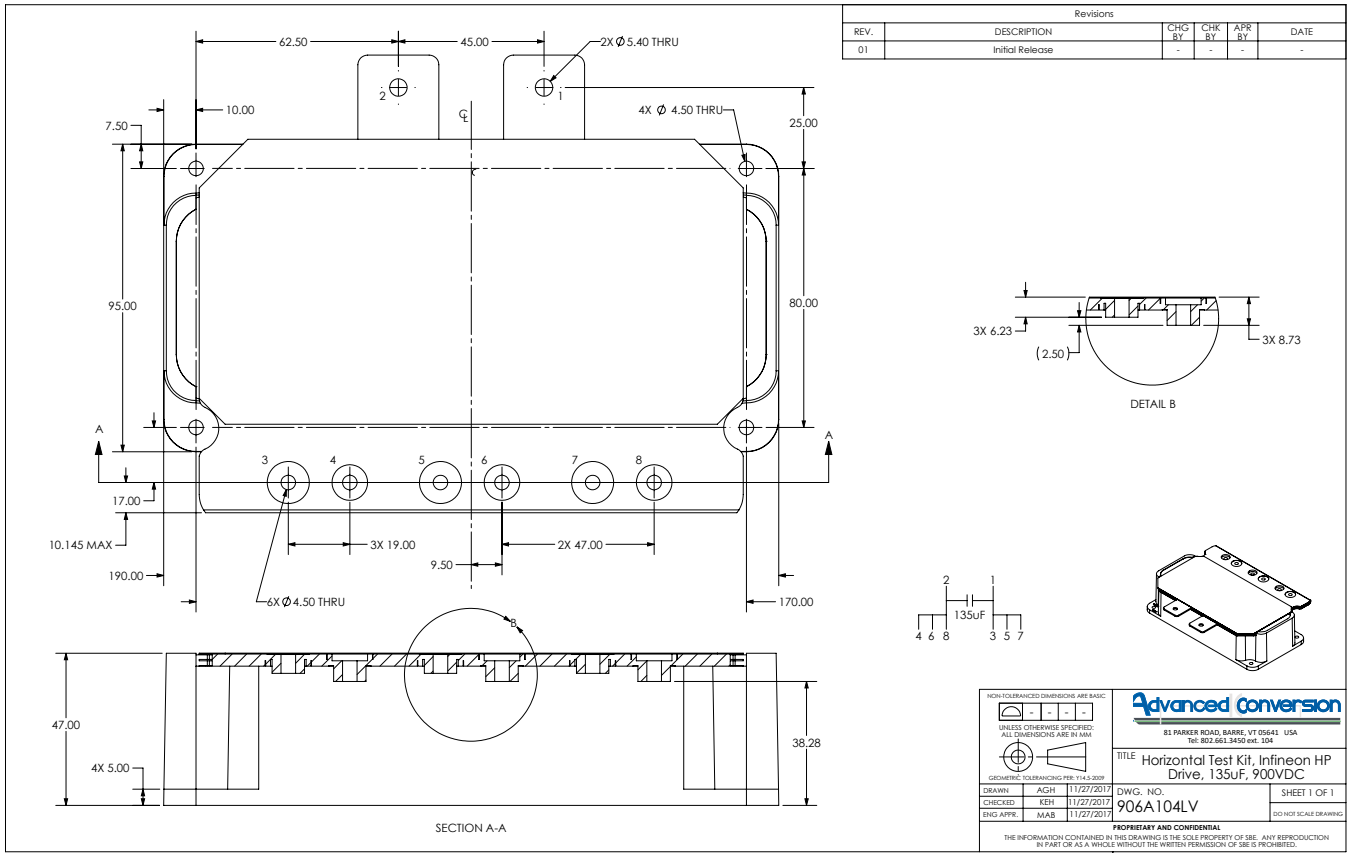


Ripple current versus average case temperature to achieve 10,000 hour life for continuous operation.

Marking:

APCS	company identification
906A104	“short form” part number
135 µF ±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.

ISO 9001 Quality

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