

## PRELIMINARY VERSION

### Integrated Capacitor/bus assembly 135 $\mu\text{F}$ , 900 Vdc with DuPont Teijin PEN HV™ film for operation to 125°C

The 906A13799-104 Power Ring assembly is a 135  $\mu\text{F}$ , 900 Vdc dual-winding DC Link Capacitor integrated with a laminar bus. The assembly has an ESR of 850  $\mu\Omega$  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.



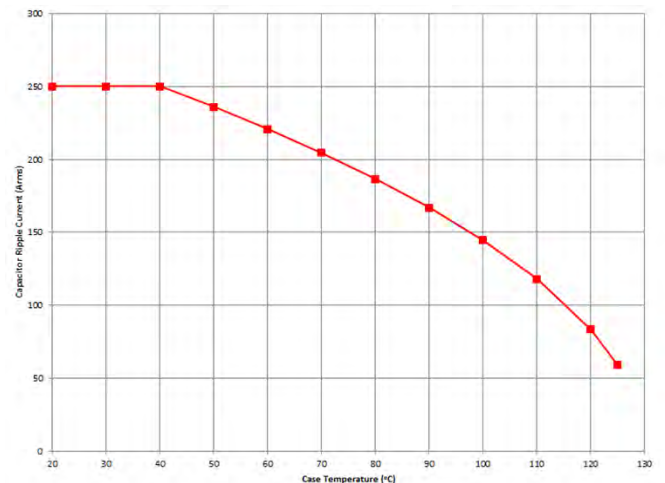
#### Electrical Specifications

<b>SBE Part #:</b>	906A13799-104
<b>Capacitance/Tolerance:</b>	135 $\mu\text{F}$ $\pm 10\%$
<b>Dielectric:</b>	Metallized high temp film
<b>ESL at IGBT Terminals:</b>	Less than 8 nH
<b>Continuous DC Voltage:</b>	900 Vdc up to 125°C (derate linearly from 900 Vdc to 540 Vdc from 125°C to 150°C hotspot)
<b>Typical ESR vs. Frequency:</b>	850 $\mu\Omega$ at 20 kHz
<b>Maximum DC Voltage:</b>	Units 100% tested at DC voltage of 1,125 Vdc for 2 minutes at 25°C
<b>Operating Temperature:</b>	-40°C to +125°C
<b>Maximum Peak Current:</b>	250 Arms (not to exceed 2 minutes and 130°C hotspot at 900 Vdc)
<b>Operating Ranges (Typical Drive Cycle):</b>	850 V < Vdc < 950 V 75Arms < I <sub>ripple</sub> < 150Arms 50°C < T <sub>coolant</sub> < 125°C

#### Mechanical Specifications

<b>Dimensions:</b>	See layout drawing for details
<b>Bus Structure:</b>	Tin plated copper, 0.060" (1.50 mm) thick
<b>Packaging:</b>	Polycarbonate enclosure encapsulated with RTV
<b>IGBT Connection Type:</b>	Thru-hole connections for Infineon HYBRIDPACK™ Drive Module
<b>Construction:</b>	Dual windings integrated to a laminar bus

#### RMS Current Rating

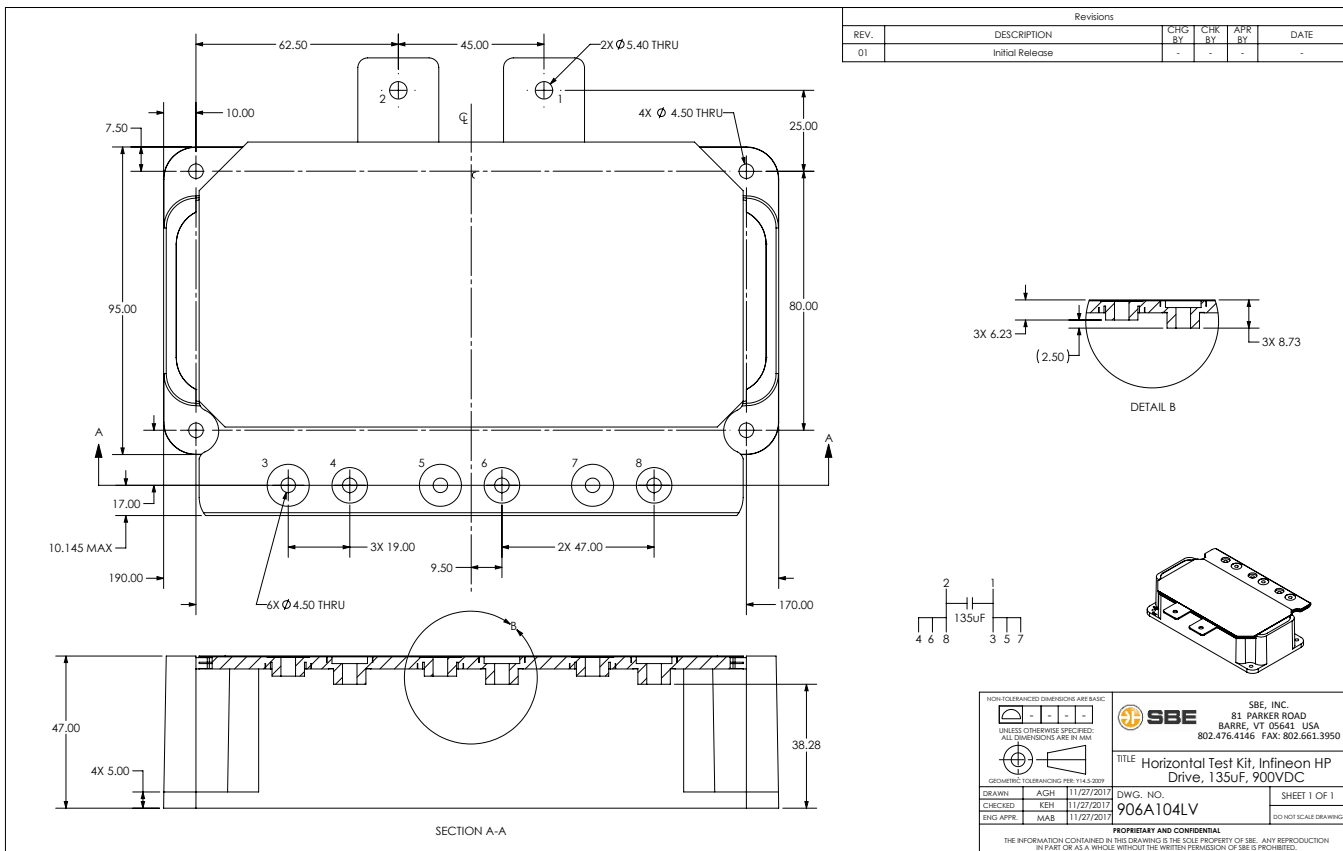


Ripple current versus average case temperature to achieve 10,000 hour life for continuous operation.

### Marking:

SBE	SBE company identification
906A104	SBE "short form" part number
135 $\mu$ 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 SBE Inc. to discuss your specific requirements.



#SBE-PR-906A104-12/17

SBE reserves the right to amend design data