

## 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.*



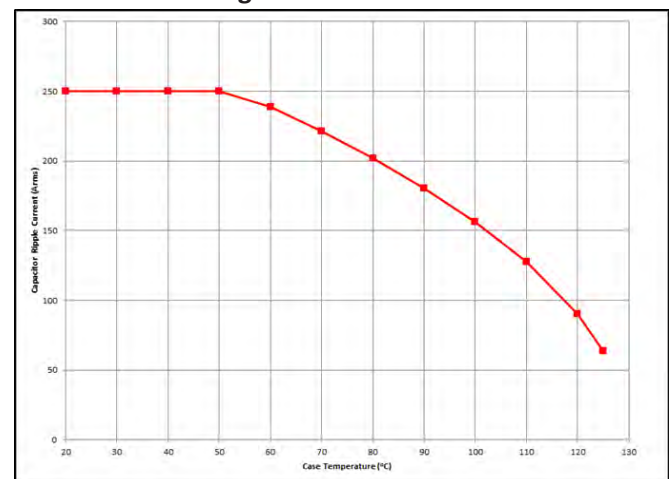
### Electrical Specifications

<b>SBE Part #:</b>	906A55795-107
<b>Capacitance/Tolerance:</b>	550 $\mu$ 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>	500 Vdc up to 125°C (derate linearly from 500 Vdc to 300 Vdc from 125°C to 150°C hotspot)
<b>Typical ESR vs. Frequency:</b>	635 $\mu\Omega$ at 20 kHz
<b>Maximum DC Voltage:</b>	Units 100% tested at DC voltage of 625 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 500 Vdc)
<b>Operating Ranges (Typical Drive Cycle):</b>	450 V < Vdc < 550 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

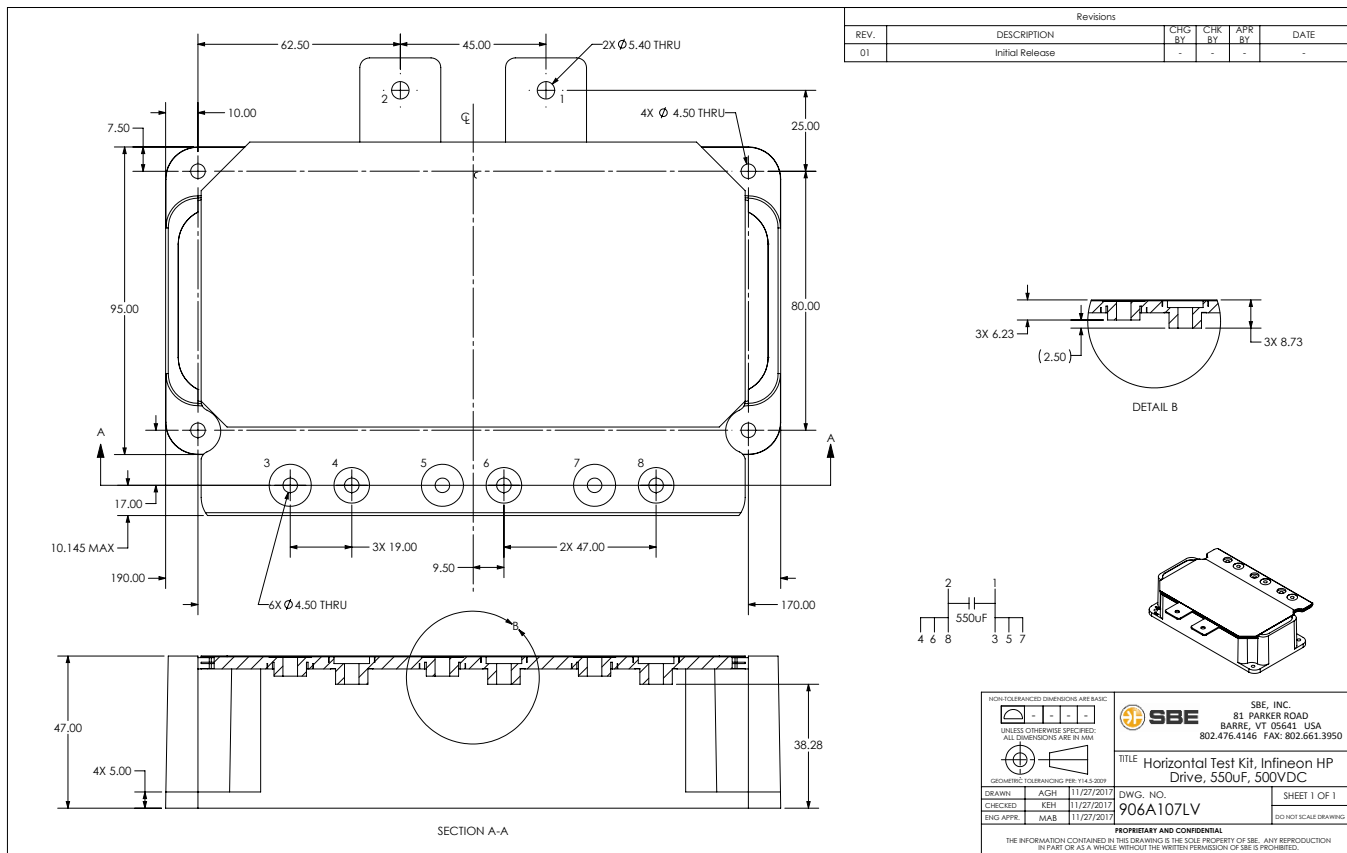


Ripple current versus average case temperature to achieve 10,000 hour life for continuous operation.

### Marking:

SBE	SBE company identification
906A107	SBE "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 SBE Inc. to discuss your specific requirements.



#SBE-PR-906A107-12/17

SBE reserves the right to amend design data