# **Power Ring Film Capacitors**

Part 906A32797-105

## PRELIMINARY VERSION

Integrated Capacitor/bus assembly 320 µF, 750 Vdc with DuPont Teijin PEN HV<sup>™</sup> film for operation to 125°C

The 906A32797-105 Power Ring assembly is a 320 µF, 750 Vdc dual-winding DC Link Capacitor integrated with a laminar bus. The assembly has an ESR of 840  $\mu\Omega$  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 #: 906A32797-105 **Capacitance/Tolerance:** 320 µF ±10%

Dielectric: Metallized high temp film

ESL at IGBT Terminals: Less than 8 nH

Continuous DC Voltage:750 Vdc up to 125°C (derate

linearly from 750 Vdc to 450 Vdc from 125°C to 150°C

hotspot)

Typical ESR vs. Frequency: 840  $\mu\Omega$  at 20 kHZ

Maximum DC Voltage: Units 100% tested at

DC voltage of 940 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 750 Vdc)

700 V < Vdc < 800 V **Operating Ranges** 

 $75 Arms < I_{ripple} < 150 Arms$ (Typical Drive Cycle):

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

Polycarbonate enclosure Packaging:

encapsulated with RTV

**IGBT Connection Type:** Thru-hole connections for

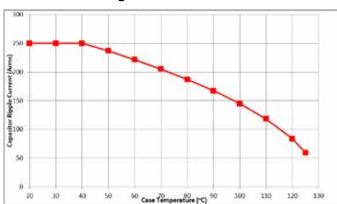
Infineon HYBRIDPACK™

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 906A105 "short form" part number 320 µF ±10% Capacitance value and

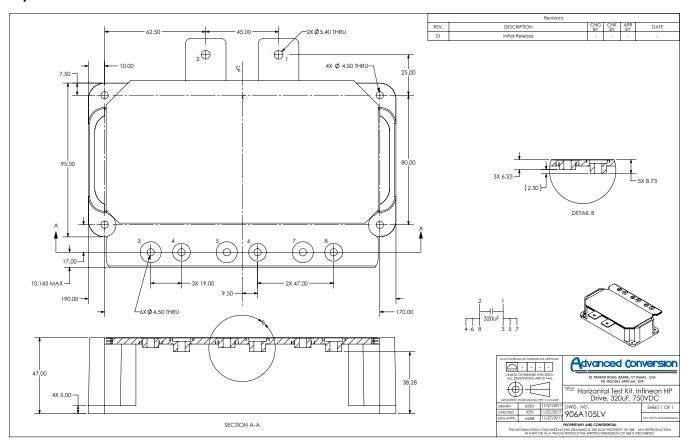
tolerance

750 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.

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