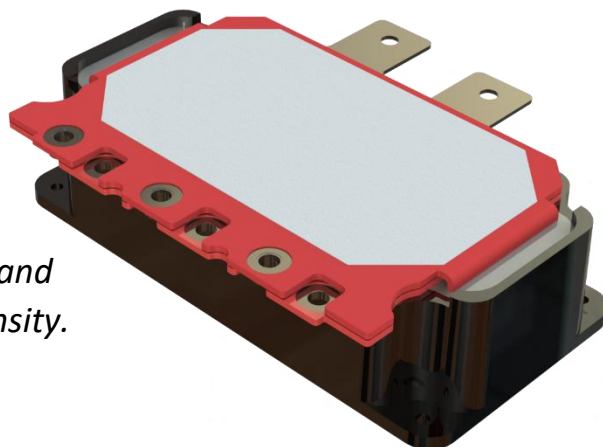


## Integrated capacitor/bus assembly

*These high-performance DC Link capacitors are optimized for use with the **Cisoid** SiC Intelligent Power Module (IPM) family.*

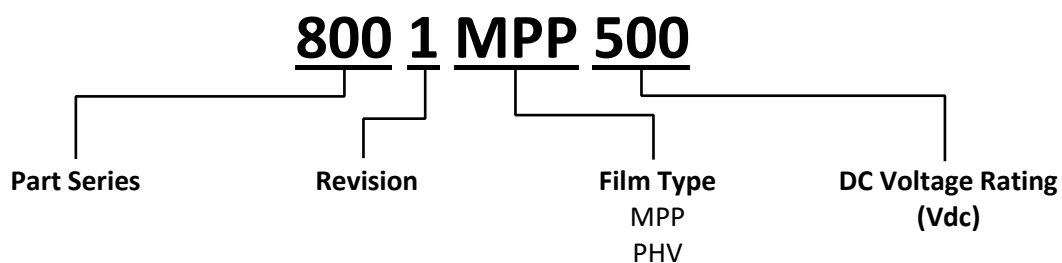
*These parts provide low ESL for fast switching of Si and SiC devices and the low ESR enables high power density.*



## Mechanical Specifications:

<b>Dimensions:</b>	See layout drawing for details
<b>Bus Structure:</b>	Tin plated copper, 0.060" (1.50mm) thick, pressed in bushings
<b>Packaging:</b>	Polycarbonate enclosure encapsulated with RTV
<b>Connection Type:</b>	Thru-hole bushing connections for Cisoid modules
<b>Construction:</b>	Dual windings integrated with a laminar bus

## Part Numbering\*



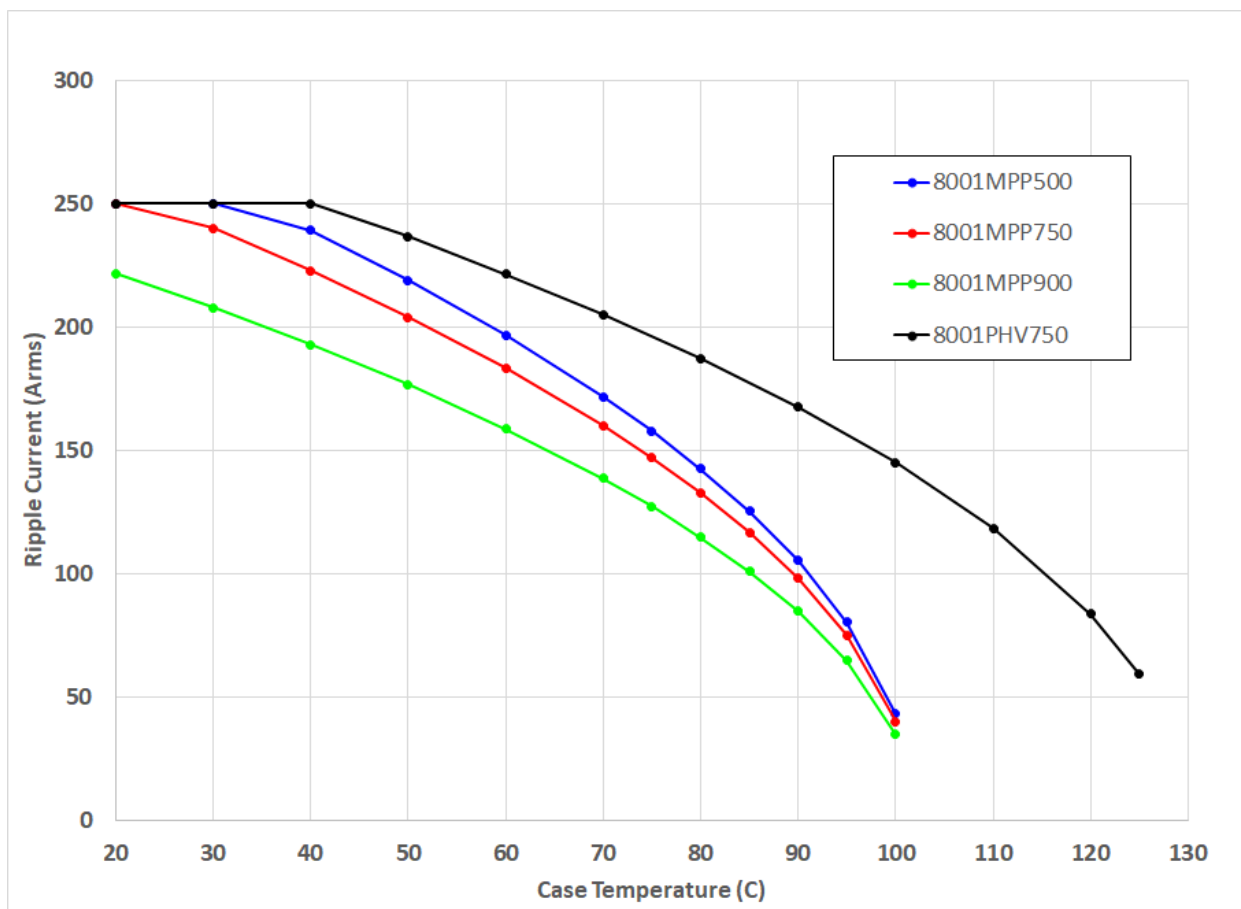
\*Omit spaces when ordering.

## Detailed Specifications:

Part Number*	8001MPP500	8001MPP750	8001MPP900	8001PHV750
Dielectric	Polypropylene metallized film	Polypropylene metallized film	Polypropylene metallized film	Kaladex® PEN HV metallized film
DC Voltage Rating (nominal)*	500 Vdc	750 Vdc	900 Vdc	750 Vdc
Capacitance/Tolerance*	500µF ±10%	260µF ±10%	260µF ±10%	320 µF ±10%
Typical ESR @ 20kHz	410 µΩ	530 µΩ	900 µΩ	840 µΩ
ESL at Module Terminals	Less than 8nH	Less than 8nH	Less than 8nH	Less than 8nH
Continuous DC Voltage Rating	500 Vdc up to 85°C	750 Vdc up to 85°C	900 Vdc up to 85°C	750 Vdc up to 125°C
Voltage De-rating (linear)	500 Vdc @ 85°C to 300Vdc @ 105°C hotspot	750 Vdc @ 85°C to 450 Vdc @ 105°C hotspot	900 Vdc @ 85°C to 600 Vdc @ 105°C hotspot	750 Vdc @ 125°C to 450 Vdc @ 150°C hotspot
Dielectric Withstand Test Voltage (100% of units)	600 Vdc for 2 minutes at 25°C	950 Vdc for 2 minutes at 25°C	1150 Vdc for 2 minutes at 25°C	940 Vdc for 2 minutes at 25°C
Operating Temperature	-40°C to +105°C	-40°C to +105°C	-40°C to +105°C	-40°C to +125°C
Maximum Peak Current	250 Arms (not to exceed 2 minutes and 85°C hotspot at 500 Vdc)	200 Arms (not to exceed 2 minutes and 85°C hotspot at 750 Vdc)	150 Arms (not to exceed 2 minutes and 85°C hotspot at 900 Vdc)	250 Arms (not to exceed 2 minutes and 130°C hotspot at 750 Vdc)
Operating Ranges (Typical Drive Cycle)	350 V < Vdc < 550 V 75A <sub>rms</sub> < I <sub>ripple</sub> < 125A <sub>rms</sub> 50°C < T <sub>coolant</sub> < 85°C	600 V < Vdc < 800 V 75A <sub>rms</sub> < I <sub>ripple</sub> < 125A <sub>rms</sub> 50°C < T <sub>coolant</sub> < 85°C	650 V < Vdc < 950 V 75A <sub>rms</sub> < I <sub>ripple</sub> < 125A <sub>rms</sub> 50°C < T <sub>coolant</sub> < 85°C	600 V < Vdc < 800 V 75A <sub>rms</sub> < I <sub>ripple</sub> < 150A <sub>rms</sub> 50°C < T <sub>coolant</sub> < 125°C
Company Identification*	APCS	APCS	APCS	APCS
Serial Number* (date code, lot number, unit number)	yyww-lot#-unit	yyww-lot#-unit	yyww-lot#-unit	yyww-lot#-unit

\*Indicates information included on the part label.

## RMS Current Rating Curves:



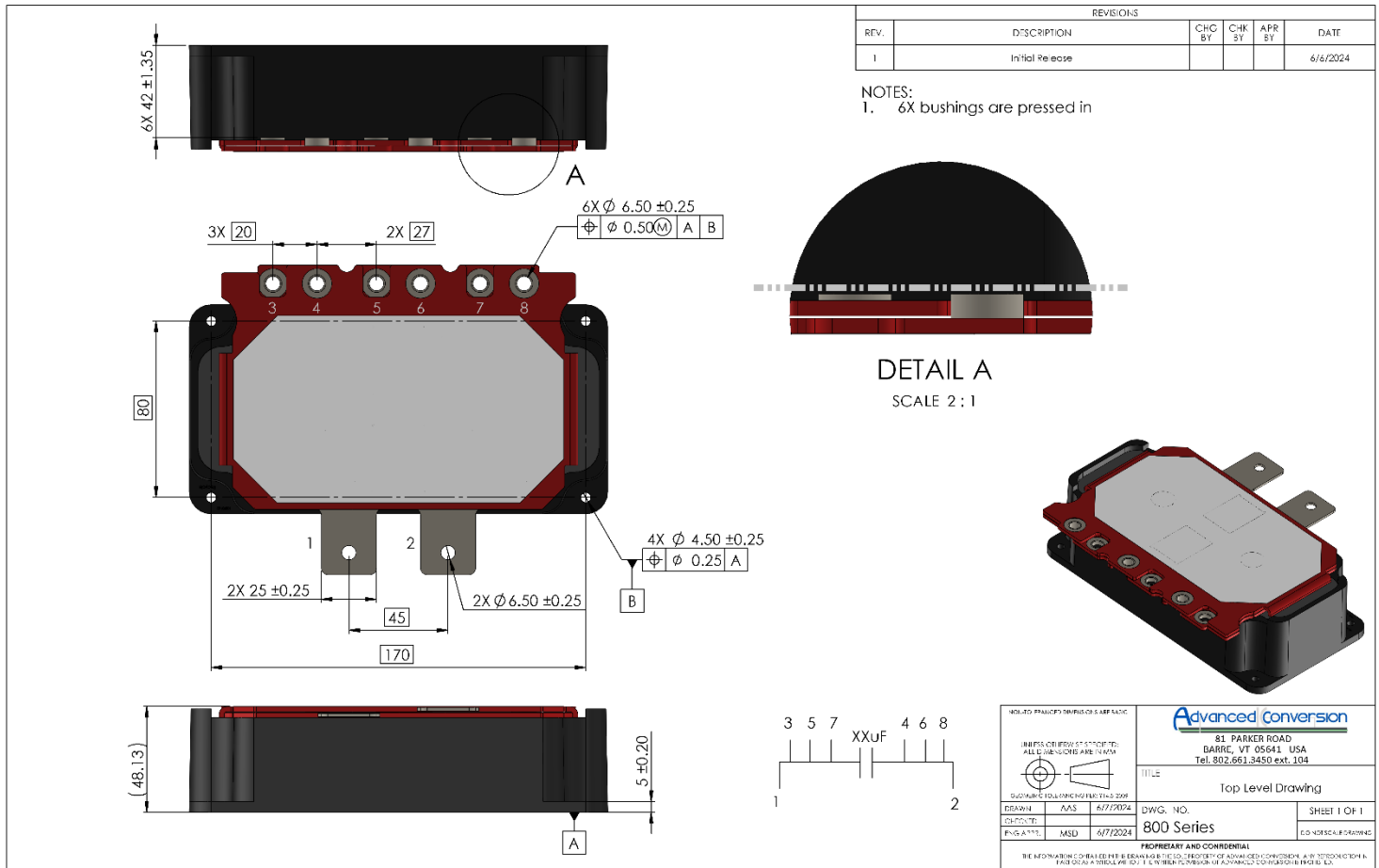
Ripple current versus case temperature for 10,000 hour life with a typical drive cycle and the average operating voltages listed below:

8001MPP500: 450 Vdc

8001MPP750 and 8001PHV750: 675 Vdc

8001MPP900: 800 Vdc

### Layout Details:



Advanced Conversion reserves the right to amend this datasheet without notice.

Revision Table		
Revision	Description	Date
Rev 1	Initial Release	6/7/2024
Rev 2	Updated product offerings	8/13/25
Rev 3	Updated product offerings	8/27/25