

Single Phase Bridge Rectifiers

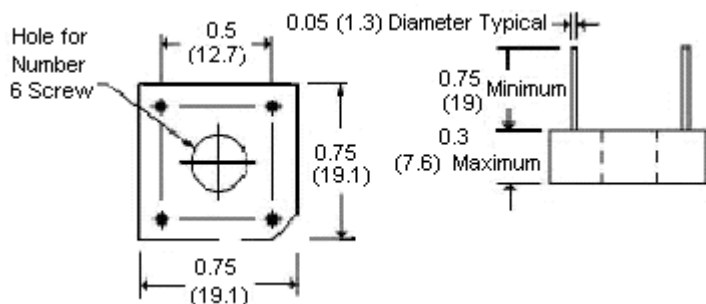


CP80 Series



Features:

- High surge current capability
- PCB mounted / screw fixing
- Surge overload rating: 200 A peak
- Low forward voltage drop and reverse leakage
- Small size, simple installation
- Reliable low cost construction utilizing moulded plastic technique



Dimensions : Inches (Millimetres)

Mechanical Data:

Mounting Position : Any
 Terminals : Leads solderable per MIL-STD- 202, Method 208
 Mounting : Through hole for a number 6 screw

Maximum Ratings and Electrical Characteristics

At 25°C ambient temperature unless otherwise noted; resistive or inductive load at 60 Hz

Parameter	CP802	CP806	Unit
Maximum Recurrent Peak Reverse Voltage	200	600	V
Maximum Bridge Input Voltage RMS	140	420	
Maximum Average Rectified Output at See Figure 2	$T_C = 50^\circ\text{C}$ $T_A = 40^\circ\text{C}$		A
Peak One Cycle Surge Overload Current	200		
Maximum Forward Voltage Drop Per Element at 4 A dc and 25°C See Figure 3	1.1		V
Maximum Reverse Leakage at Rated DC Blocking Voltage Per Element at 25°C See Figure 4	10	1	μA mA
I ² t Rating for Fusing (t < 8.3 ms)	166		A ² s
Typical Junction Capacitance Per Leg (Note 4) C _J	200		pF
Typical Thermal Resistance Per Leg (Note 3) R _{θJA} Typical Thermal Resistance Per Leg (Note 2) R _{θJL}	21 6		°C / W
Operating Temperature Range	-55 to +125		°C
Storage Temperature Range	-55 to +150		

- Notes :**
1. Bolt down on to a heat-sink with silicon thermal compound between bridge and mounting surface for maximum heat transfer with a number 6 screw
 2. Units mounted on a 8.6 × 8.6 × 24 inches thick (22 × 22 × 0.6 cm) aluminium plate heatsink
 3. Units mounted on PCB at 0.375 inches (9.5 mm) lead length with 0.5 × 0.5 inches (12 × 12 mm) copper pads
 4. Measured at 1 MHz and applied reverse voltage

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Rating and Characteristic Curves

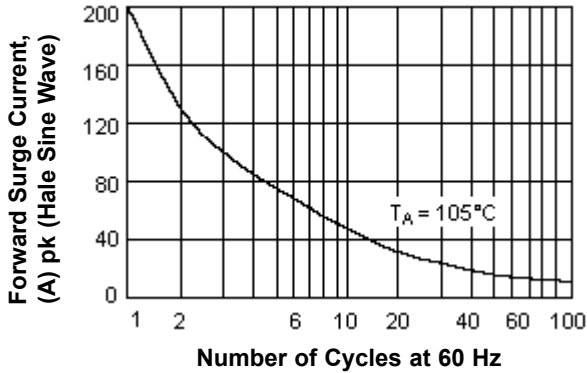


Figure 2 - Derating Curve for Output Rectified Current

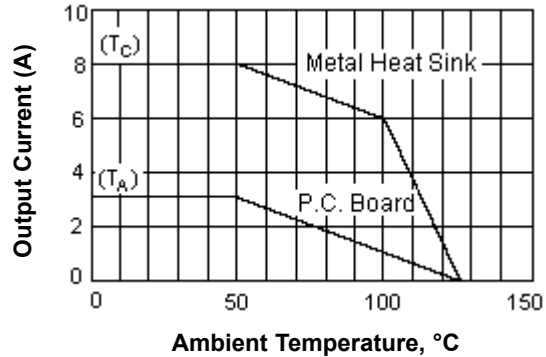


Figure 3 - Typical Forward Characteristics (25°C)

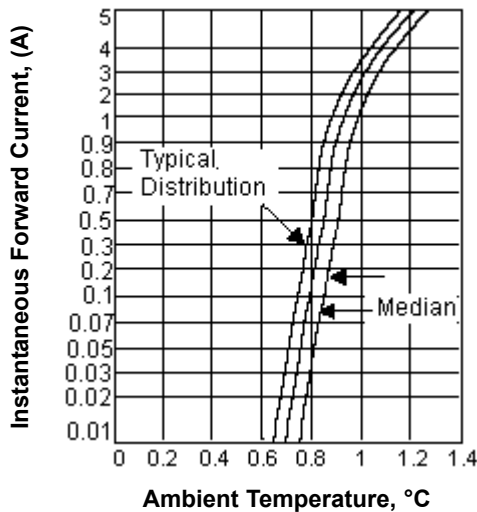
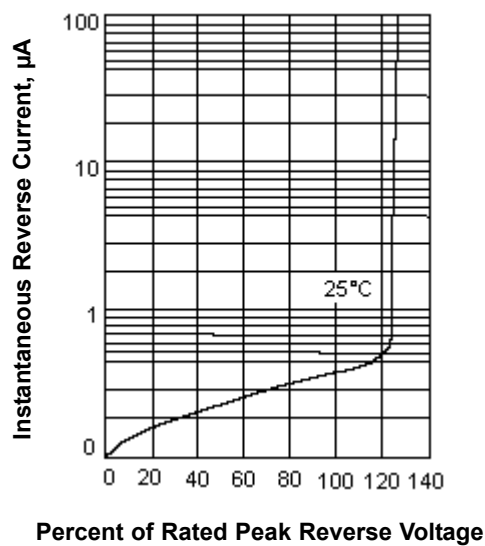


Figure 4 - Reverse Characteristics



Specification Table

V _{RRM} (V)	Maximum Input Voltage (V ac)	I _O (A)	T _A (°C)	I _{FSM} (A)	Body		Lead			Part Number
					Height	Width / Depth	Length	Spacing	Diameter	
200	600	8	50	200	7.6	19.1	19.1	12.7	1.3 Typical	CP802
600	420									CP806

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