

# CP1000 THRU CP1008

## SINGLE-PHASE SILICON BRIDGE

VOLTAGE - 50 to 800 Volts CURRENT - P.C. MTG 3A, HEAT-SINK MTG 10A

### FEATURES

- Surge overload rating—200 Amperes peak
- Low forward voltage drop and reverse leakage
- Small size, simple installation
- Plastic package has Underwriter Laboratory Flammability Classification 94V-O
- Reliable low cost construction utilizing molded plastic technique

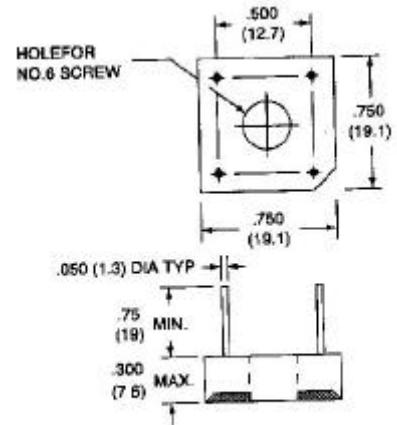
### MECHANICAL DATA

Case: Molded plastic with heatsink integrally mounted in the bridge encapsulation

Terminals: Leads solderable per MIL-STD-202, Method 208

Weight: 0.21 ounce, 6.1 grams

### CP-10



Dimensions in inches and (millimeters)

### MACXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	CP1000	CP1001	CP1002	CP1004	CP1006	CP1008	UNITS
Max Recurrent Peak Rev Voltage	50	100	200	400	600	800	V
Max Bridge Input Voltage RMS	35	70	140	280	420	560	V
Max Average Rectified Output at $T_C=50$ * See Fig. 2 at $T_C=100$ * at $T_A=50$ **			10.0				A
			3.0				A
			3.0				
Peak One Cycle Surge Overload Current			200				A
Max Forward Voltage Drop per element at 5.0A DC & 25 . See Fig. 3			1.1				V
Max Rev Leakage at rated Dc Blocking Voltage per element at 25 See Fig 4 at 100			10.0				A
			1.0				mA
Typical junction capacitance per leg (Note 4) CJ			200				pF
I <sup>2</sup> t Rating for fusing ( t<8.3ms)			164				A <sup>2</sup> S
Typical Thermal Resistance (Note 2) R JA			25				/W
Typical Thermal Resistance (Note 3) R JC			5				
Operating Temperature Range			-55 TO +125				
Storage Temperature Range			-55 TO +150				

### NOTES:

\* Unit mounted on metal chassis.

\*\* Unit mounted on P.C. board.

1. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.
2. Units Mounted in free air, no heatsink. P.C.B at 0.375"(9.5mm) lead length with 0.5×0.5"

(12×12mm)copper pads.

3. Units Mounted on a 3.0×3.0" ×0.11" thick (7.5×7.5×0.3cm) AL plate heatsink.

4. Measured at 1.0MHZ and applied reverse voltage of 4.0 volts.

### RATING AND CHARACTERISTIC CURVES

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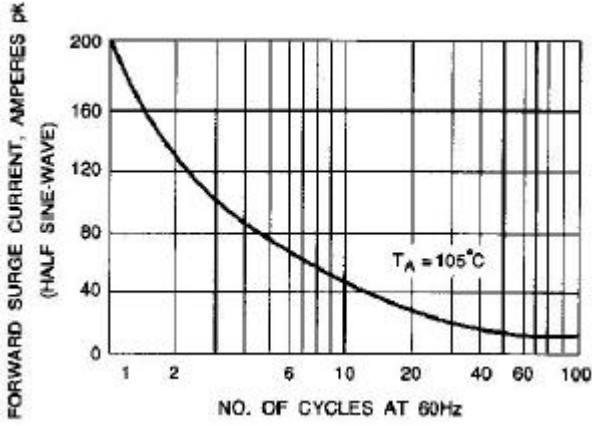


Fig. 1-NON-RECURRENT SURGE RATING

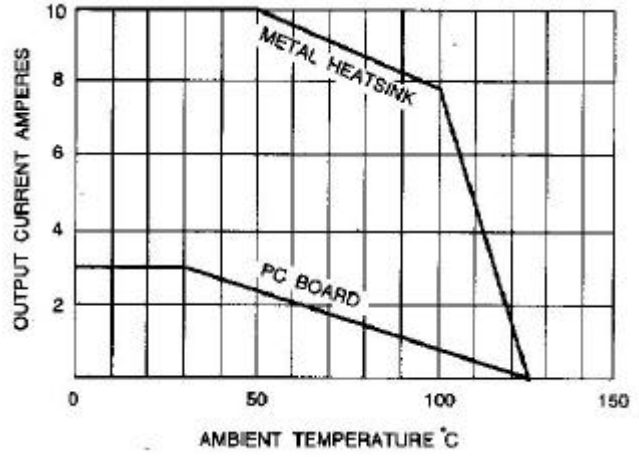


Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

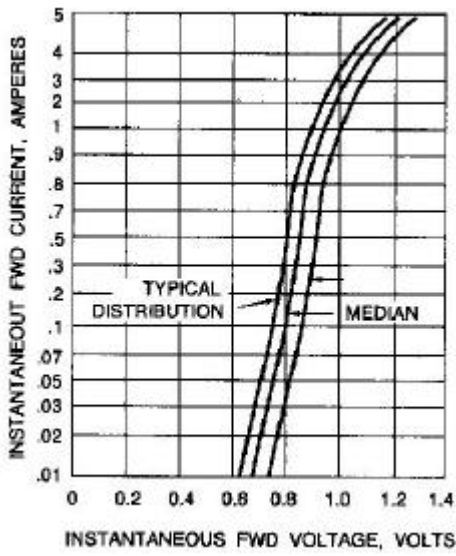


Fig. 3-TYPICAL FORWARD CHARACTERISTICS

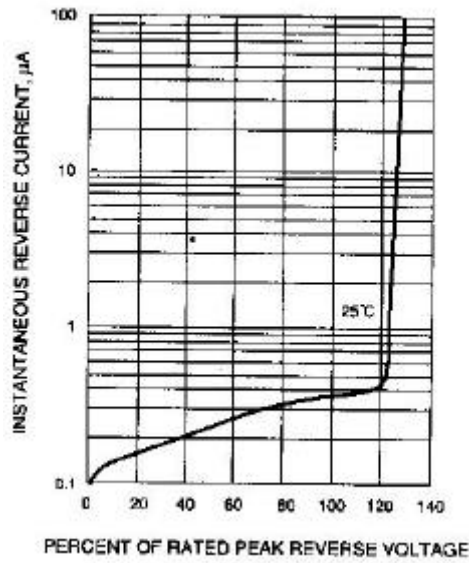


Fig. 4- TYPICAL REVERSE CHARACTERISTICS