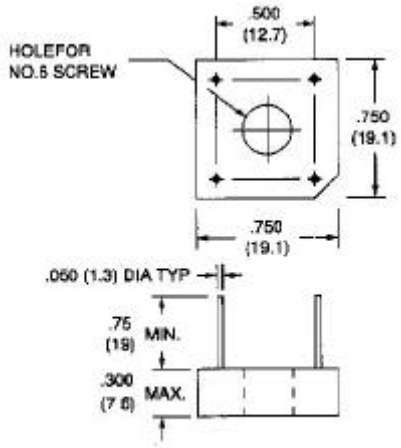
CP800 THRU CP808

SINGLE-PHASE SILICON BRIDGE

VOLTAGE - 50 to 800 Volts CURRENT - P.C. MTG 3A, HEAT-SINK MTG 8A

CP-8



Dimensions in inches and (millimeters)

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

Mounting position: Any

Weight: 0.24 ounce, 6.9 grams

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

Mounting torque: Thro hole for #6 screw

MACXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	CP800	CP801	CP802	CP804	CP806	CP808	UNITS
Max Recurrent Peak Reverse 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_A=40 **	8.0 3.0						A A
Peak One Cycle Surge Overload Current	200						A
Max Forward Voltage Drop per element at 4.0A DC & 25 . See Fig. 3	1.1						V
Max Rev Leakage at rated Dc Blocking Voltage per element at 25 See Fig 4 at100	10.0 1.0						A mA
I^2t Rating for fusing (t<8.3ms)	166						A^2Sec
Typical junction capacitance per leg (Note 4) CJ	200						$_PF$
Typical Thermal Resistance per leg (Note 3) R JA Typical Thermal Resistance per leg (Note 2) R JL	21 6						/W
Operating Temperature Range	-55 TO +125						
Storage Temperature Range	-55 TO +150						

NOTES:

1. Bolt down on heat-sink with silicon thermal compound between bridge and mounting surface for maximum heat transfer with #6 screw.
2. Units Mounted on a 8.6”×8.6” ×24” thick (22×22×0.6cm) AL plate heatsink.
3. Units Mounted on P.C.B at 0.375”(9.5mm) lead length with 0.5×0.5”(12×12mm)copper pads.

4. Measured at 1.0MHZ and applied reverse voltage.

RATING AND CHARACTERISTIC CURVES

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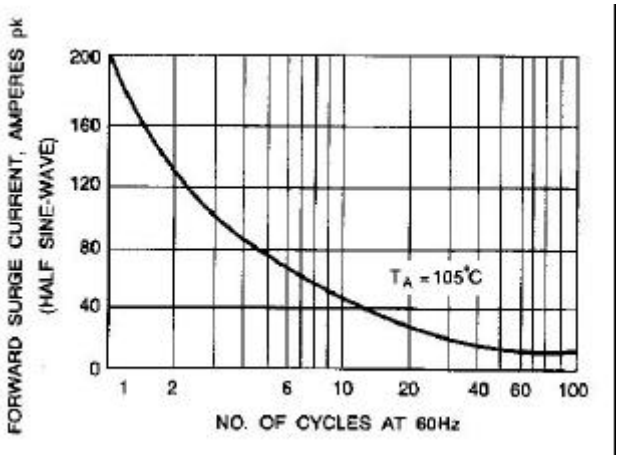

Fig. 1-NON-RECURRENT SURGE RATING

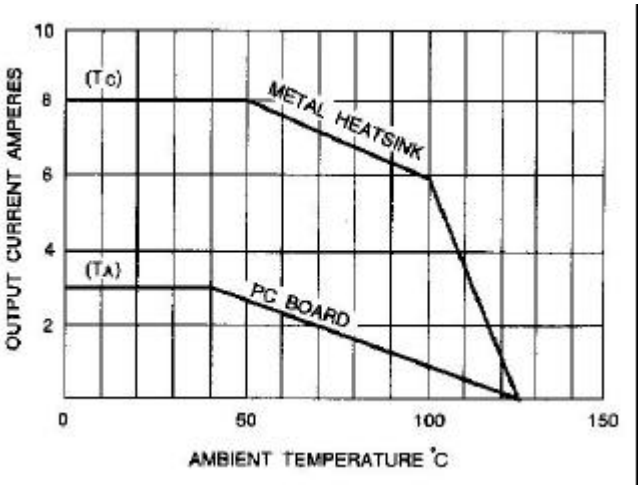

Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

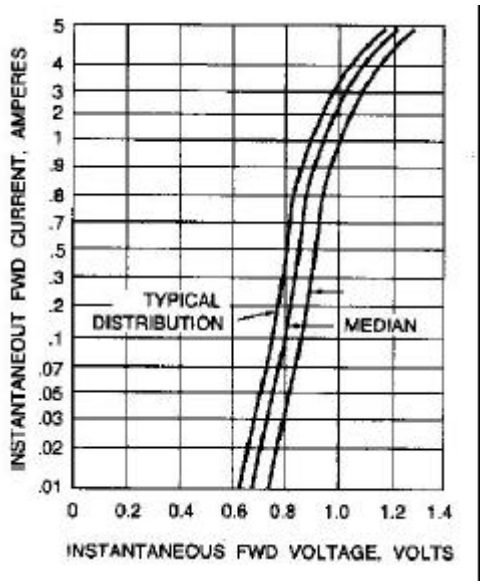

Fig. 3-TYPICAL FORWARD CHARACTERISTICS

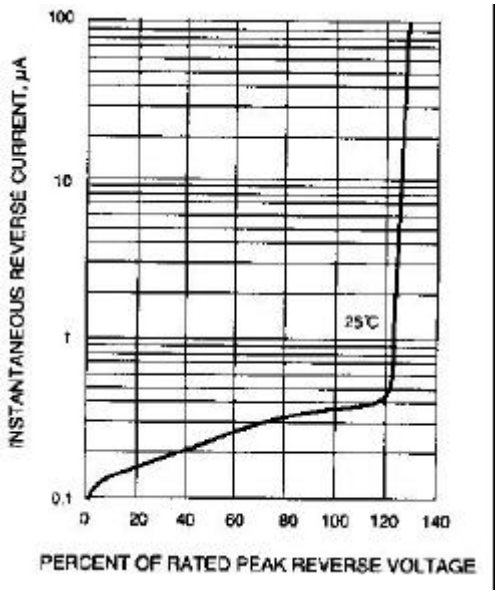

Fig. 4- TYPICAL REVERSE CHARACTERISTICS