# **CP800 THRU CP808**

### SINGLE-PHASE SILICON BRIDGE

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

<u>CP-8</u>

#### **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



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

# HOLEFOR NO.5 SCREW

Dimensions in inches and (millimeters)

## 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 <sub>c</sub> =50 *	8.0						Α
See Fig. 2 at T <sub>A</sub> =40 **	3.0						Α
Peak One Cycle Surge Overload Current	200						Α
Max Forward Voltage Drop per element at	1.1						V
4.0A DC & 25 . See Fig. 3							
Max Rev Leakage at rated Dc Blocking							
Voltage per element at 25	10.0						A
See Fig 4 at100	1.0						mA
I <sup>2</sup> t Rating for fusing (t<8.3ms)	166						A <sup>2</sup> Sec
Typical junction capacitance per leg (Note 4) CJ	200						₽F
Typical Thermal Resistance per leg (Note 3) R JA	21						/W
Typical Thermal Resistance per leg (Note 2) R JL	6						
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

CP800 THRU CP808

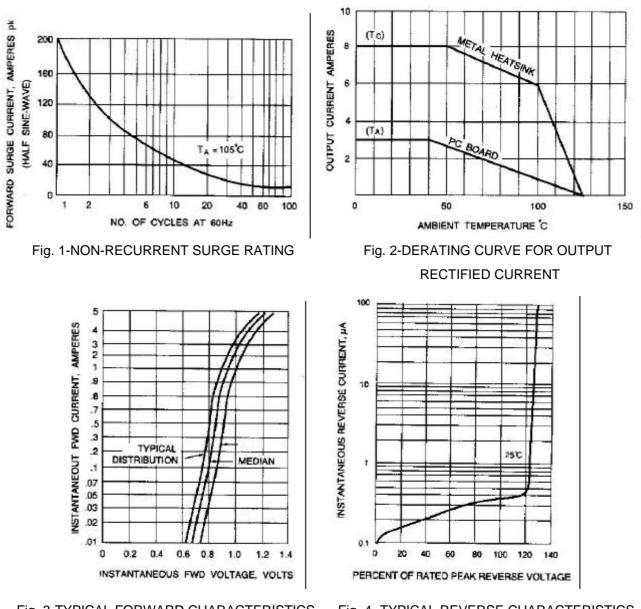




Fig. 4- TYPICAL REVERSE CHARACTERISTICS