# CP600 THRU CP608

# SINGLE-PHASE SILICON BRIDGE-P.C. MTG 3A, HEAR-SINK MTG 6A VOLTAGE - 50 to 800 Volts CURRENT - P.C. MTG 3A, HEAT-SINK MTG 6A

#### <u>CP-6</u>

#### **FEATURES**

- Surge overload rating—125 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: 0.2 ounce, 5.6 grams

Terminals: Leads solderable per MIL-STD-202,

Method 208

Mounting torque: 5 in. lb. Max.

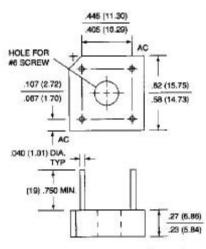
## MACXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load derate current by 20%.

	CP600	CP601	CP602	CP604	CP606	CP608	UNITS
Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	V
Max Bridge Input RMS	35	70	140	280	420	560	V
Max DC Blocking Voltage	50	100	200	400	600	800	V
Max Average Rectified Output at T <sub>c</sub> =50 *	6.0						Α
See Fig. 2 at T <sub>A</sub> =25 **	3.0						Α
Peak Forward Surge Current, 8.3ms single	125						Α
half sine-wave superimposed on rated load							
Max Forward Voltage Drop per element at	1.1						V
3.0A 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)	127						A <sup>2</sup> Sec
Typical junction capacitance per leg (Note 4) CJ	186						₽F
Typical Thermal Resistance per leg (Note 3) R JA	22.0						/W
Typical Thermal Resistance per leg (Note 2) R JL	7.3						
Operating Temperature Range T <sub>J</sub>	-55 TO +125						
Storage Temperature Range T <sub>A</sub>	-55 TO +150						



Dimensions in inches and (millimeters)

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 5.5×6.0 ×0.11" thick (14×15×0.3cm) AL plate.
- 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 of 4.0 Volts.

## RATING AND CHARACTERISTIC CURVES

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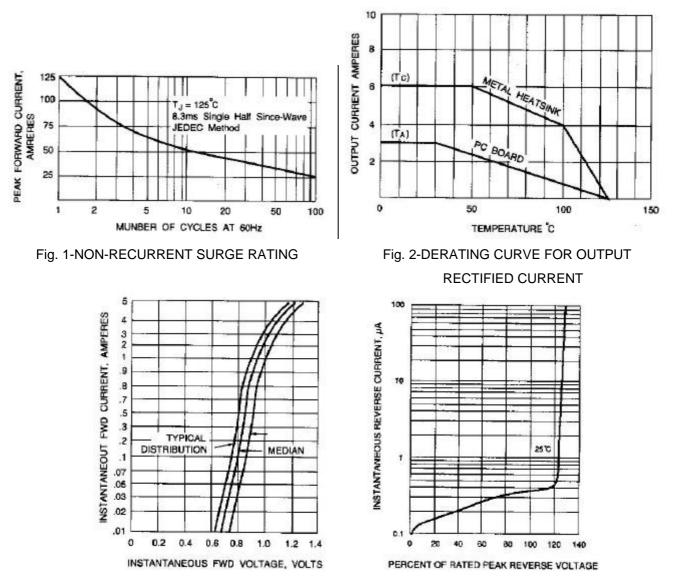


Fig. 3-TYPICAL FORWARD CHARACTERISTICS

