CP300 THRU CP3010

SINGLE-PHASE SILICON BRIDGE-P.C. MTG 2A, HEAT-SINK MTG 3A VOLTAGE - 50 to 1000 Volts CURRENT - 3.0 Amperes

FEATURES

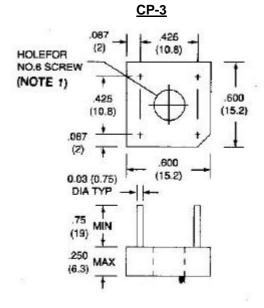
- Surge overload rating—50 Amperes peak
- Low forward voltage drop and reverse leakage
- Small size, simple installation
- Plastic package has Underwriter Laboratory
 Flammability Classification 94V-O
- Reliable low cost construction utilizing molded plastic technique

MECHANICAL DATA

Terminals: Leads solderable per MIL-STD-202,

Method 208

Weight: 0.08 ounce, 2.5 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	CP300	CP301	CP302	CP304	CP306	CP308	CP3010	UNITS
Max Recurrent Peak Rev Voltage	50	100	200	400	600	800	1000	V
Max Bridge Input Voltage RMS	35	70	140	280	420	560	700	V
Max Average Rectified Output at T _C =50 *	3.0							Α
See Fig.2 at T _A =25 **	2.0							
Peak One Cycle Surge Overload Current	50							Α
Max Forward Voltage Drop per element at	1.0							V
1.5A DC & 25 . See Fig.3								
Max Rev Leakage at Rated DC Blocking	10.0							Α
Voltage per element at 25	1.0							mA
See Fig.4 at 100								
I ² t Rating for fusing (t<8.3ms)	15.0							A ² Sec
Typical Junction capacitance per leg(Note 4)CJ	21.0							₽F
Typical Thermal Resistance per leg(Note 2) R JA	12.0							/W
(Note 3) R JL				8.0				
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. Unit mounted on 4.0×4.0×0.11" thick (10.5×10.5×0.3cm) AL. Plate.
- 3. Unit mounted on P.C.B at 0.375"(9.5mm) lead length with 0.5×0.5 " (12×12 mm) copper pads.
- 4. Measured at 1 MHz and applied reverse voltage of 4.0 Volts.

RATING AND CHARACTERISTIC CURVES CP300 THRU CP3010

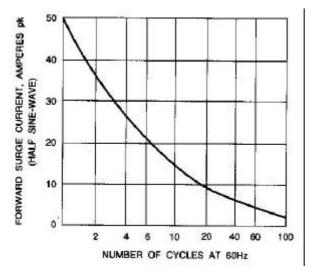


Fig. 1-NON-RECURRENT SURGE RATING

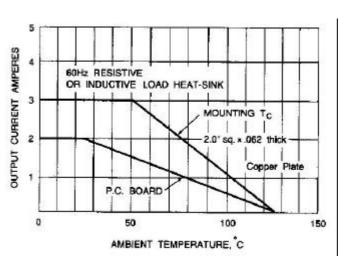


Fig. 2-DERATING CURVE FOR OUTPUT

RECTIFIED CURRENT

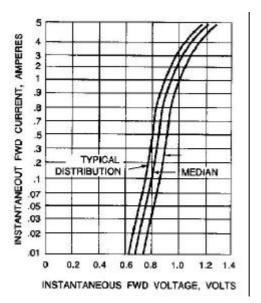


Fig. 3-TYPICAL FORWARD CHARACTERISTICS

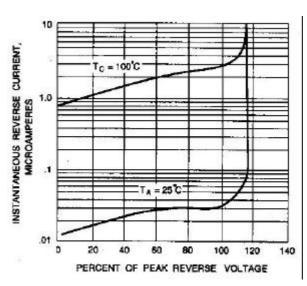


Fig. 4- TYPICAL FORWARD CHARACTERISTICS