PANJIT SEMI CONDUCTOR

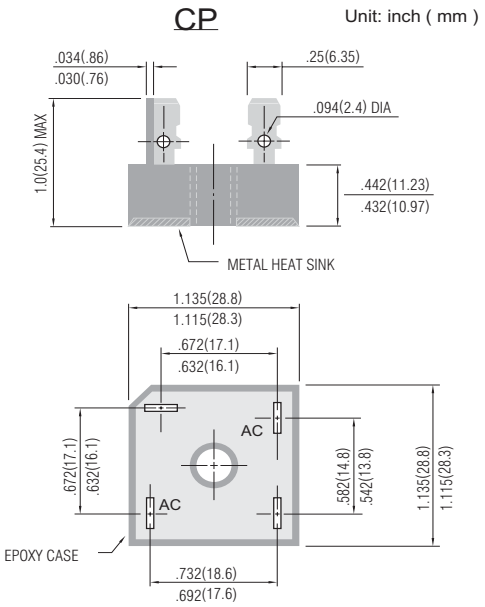
DATA SHEET

CP5000~CP50010

HIGH CURRENT SILICON BRIDGE RECTIFIER

VOLTAGE 50 to 1000 Volts CURRENT - 50 Ampere

Recongnized File # E111753



FEATURES

- Electrically Isolated Metal Case for Maximum Heat Dissipation.
- Surge Overload Ratings to 400 Amperes.
- The plastic package has Underwriters Laboratory Flammability Classification 94V-O

MECHANICAL DATA

Case: Metal , electrically isolated.

Terminals: Plated 25" FASTON

Mounting Position: Any

Weight: 1.0 ounce, 30 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, Resistive or inductive load.
For capacitive load, derate current by 20%

	CP5000	CP5001	CP5002	CP5004	CP5006	CP5008	CP50010	UNIT
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Input Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
DC Output Voltage, Resistive load	30	62	124	250	380	505	630	V
DC Output Voltage, Capacitive load	50	100	200	400	600	800	1000	V
Maximum Average Forward Current For Resistive Load at TC=55°C	50.0							A
Non-repetitive Peak Forward Surge Current at Rated Load	400							A
Maximum Forward Voltage per Bridge Element at 25A Specified Current	1.2							V
Maximum Reverse Leakage Current at Rated @ T_A=25°C Dc Blocking Voltage @ T_A=100°C	10.0 1000							μA
I^2t Rating for fusing (t<8.35ms)	664							A^2S
Typical Thermal Resistance per leg (Fig 3) RθJC	2.0							°C / W
Operating Temperature Range, T_J	-55 to +150							°C
Storage Temperature Range, T_A	-55 to +150							°C

RATING AND CHARACTERISTIC CURVES

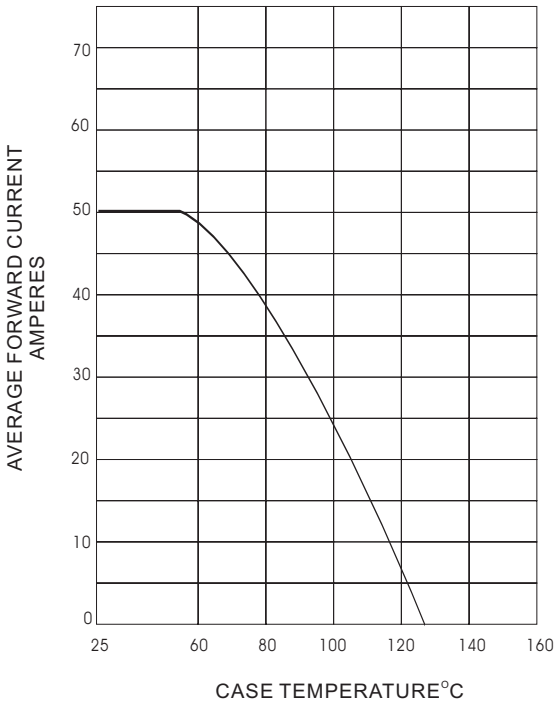


Fig. 1- OUTPUT CURRENT VS.CASE TEMPERATURE
RESISTIVE OR INDUCTIVE LOAD T_J=150°C

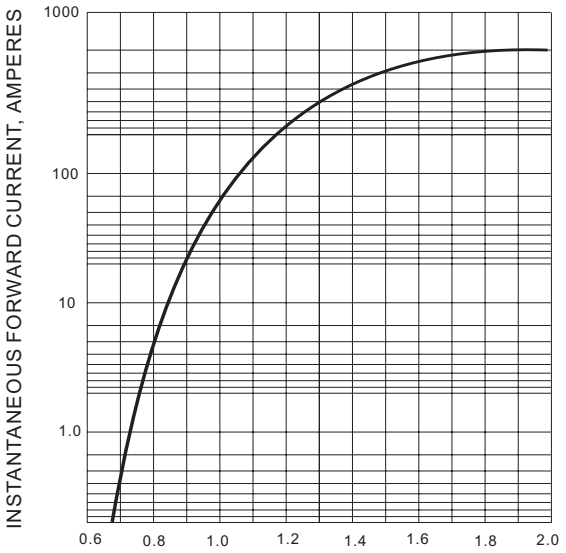


Fig. 2- TYPICAL INSTANTANEOUS
FORWARDCHARACTERISITCS
AT T_J=25°C

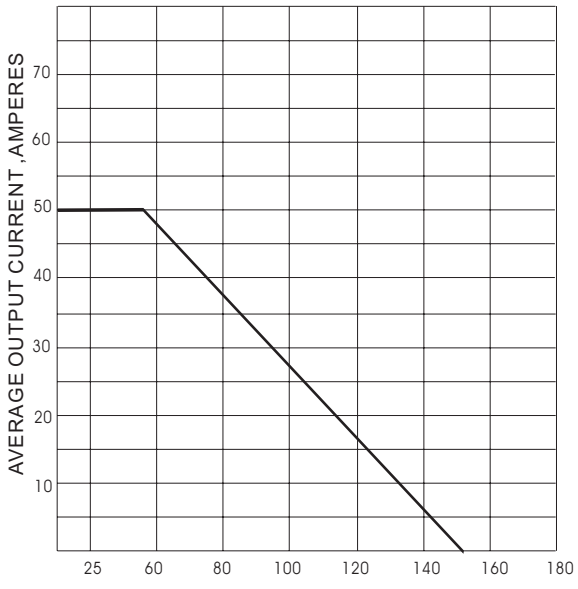


Fig. 3- OUTPUT CURRENT VS.AMBIENT TEMPERATURE
RESISTIVE OR INDUCTIVE LOAD
BRIDGE MOUNTED ON A 8" x 8" ALUMINUM PLATE 25"THICK

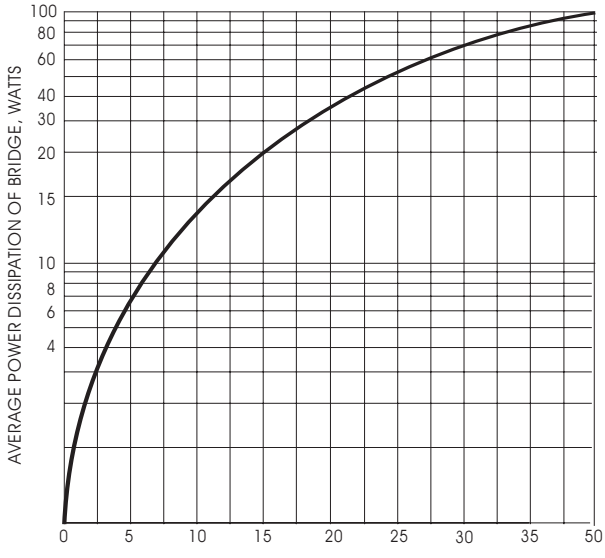


Fig. 4- POWER DISSIPATION VS.AVERAGE OUTPUT
CURRENT RESISTIVE OR INDUCTIVE LOAD
TJ=150°C