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Jameco Part Number 299866

PANJIT SEMI CONDUCTOR

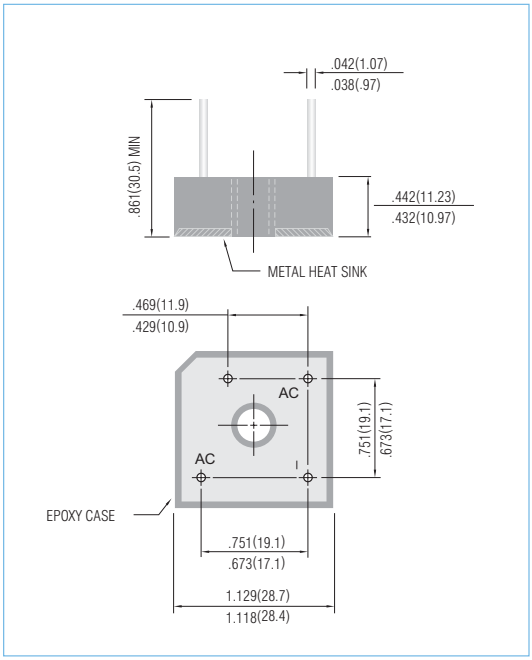
DATA SHEET

GBPC12005W~GBPC1208W

HIGH CURRENT SILICON BRIDGE RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 12 Amperes

GBPC-W Unit: inch (mm)



FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- The plastic package has Underwriters Laboratory Flammability Classification 94V-O.
- Surge overload ratings to 200 Amperes .

MECHANICAL DATA

Case:Molded plastic with heatsink integrally mounthed in the bringe encapsulation.

Mounting position: Any

Weight: 1 ounce, 30 grams

" W " Sufflx Designates Wlre Leads

All Models are Available on B(Height)=7.62mm Max. Epoxy Case

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°Cambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.
For Capacitive load derate current by 20%.

	GBPC 12005W	GBPC 1201W	GBPC 1202W	GBPC 1204W	GBPC 1206W	GBPC 1208W	UNIT
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	V
Maximum RMS Input Voltage	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	V
DC Output Voltage, Resistive load	30	62	124	250	380	505	V
DC Output Voltage, Capacitive load	50	100	200	400	600	800	V
Maximum Average Forward Current For Resistive Load at TC=55°C	12						A
Non-repetitive Peak Forward Surge Current at Rated Load	200						A
Maximum Forward Voltage per Bridge Element at 6.0A 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)	374 / 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

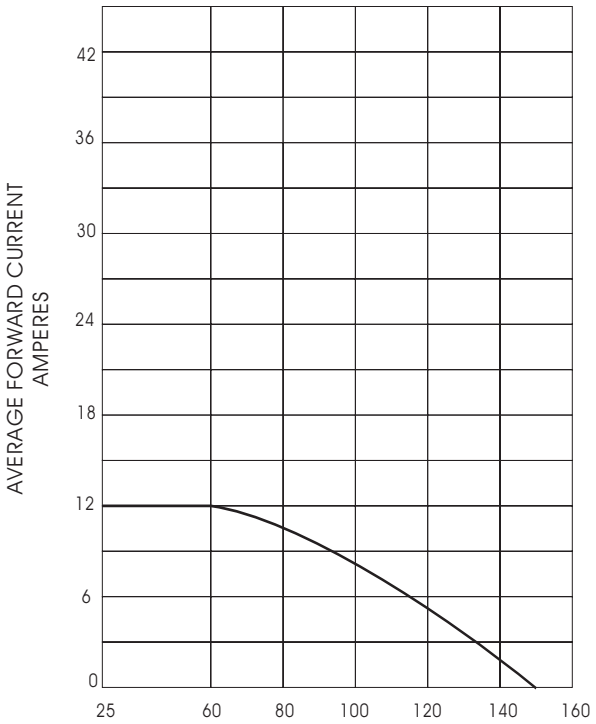


Fig. 1- OUTPUT CURRENT VS.CASE TEMPERATURE
RESISTIVE OR INDUCTIVE LOAD T_J=150°C

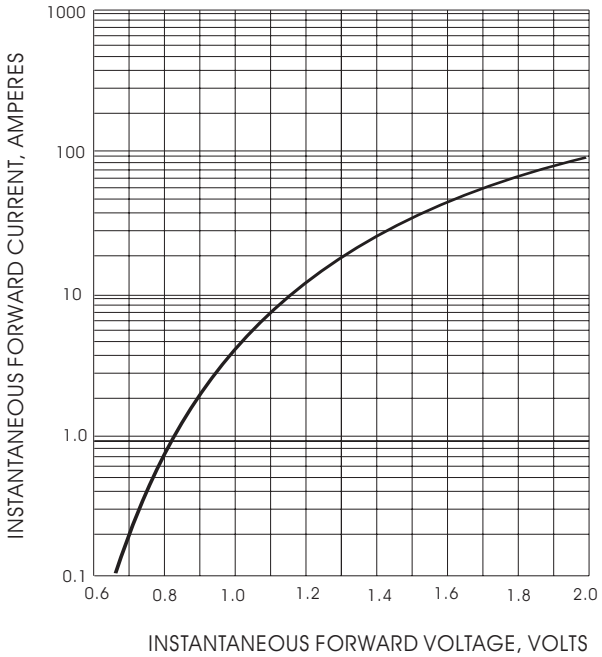


Fig. 2- TYPICAL INSTANTANEOUS
FORWARDCHARACTERISITCS
AT T_J=25°C

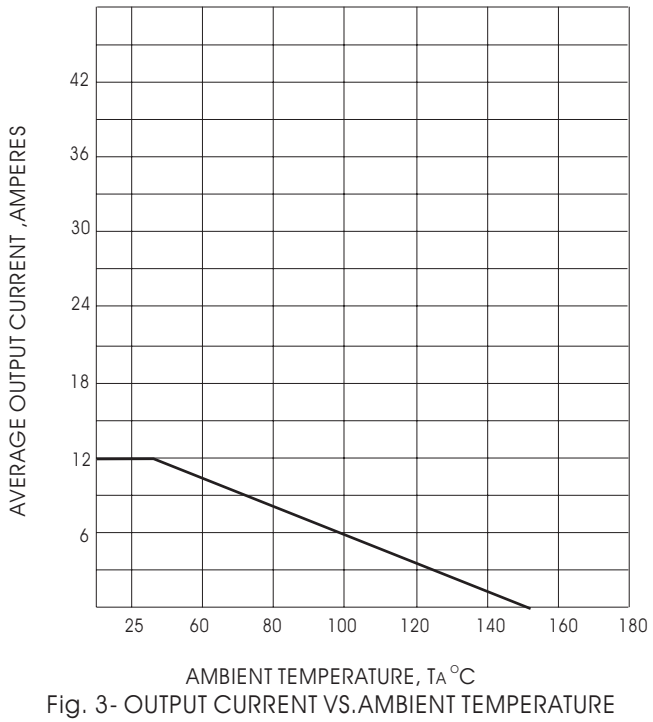


Fig. 3- OUTPUT CURRENT VS.AMBIENT TEMPERATURE
RESISTIVE OR INDUCTIVE LOAD
BRIDGE MOUNTED ON A 8" x 8" ALUMINUM PLATE 25"THICK

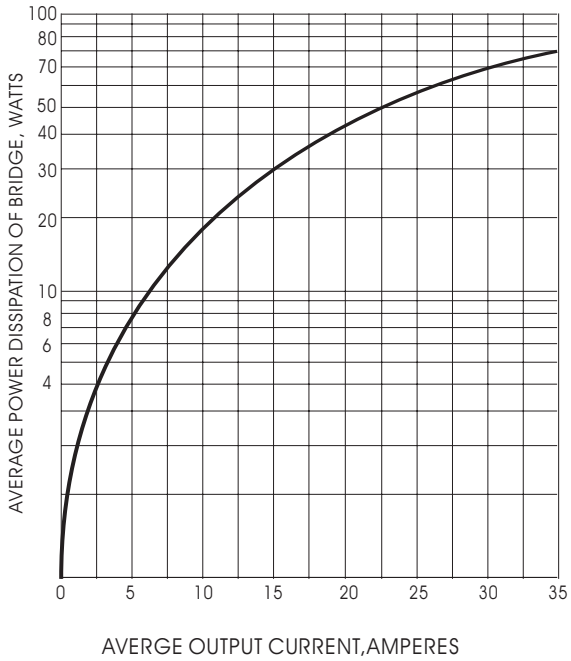


Fig. 4- POWER DISSIPATION VS.AVERAGE OUTPUT
CURRENT RESISTIVE OR INDUCTIVE LOAD
TJ=150°C