



DATA SHEET

GBPC25005W~GBPC2510W

HIGH CURRENT SILICON BRIDGE RECTIFIER

VOLTAGE - 50 to 1000 Volts CURRENT - 25 Amperes

FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- The plastic package has Underwriters Laboratory Flammability Classification 94V-O.
- Surge overload ratings to 300 Amperes .

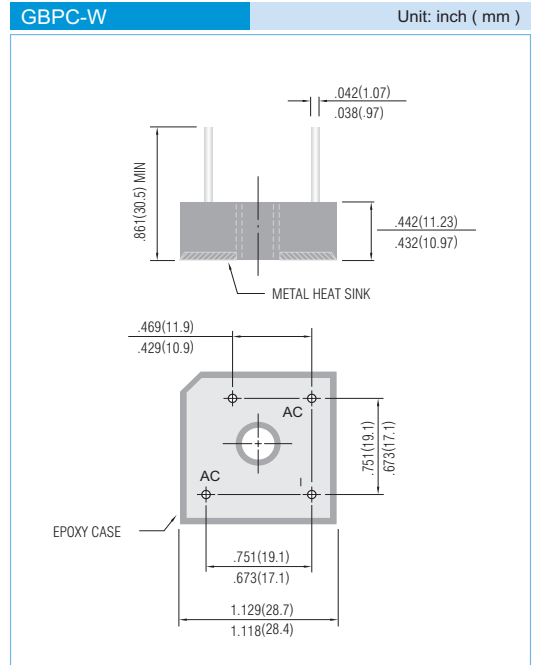
MECHANICAL DATA

Case: Molded plastic with heatsink integrally mounded in the bridge encapsulation.

Mounting position: Any

Weight: 1 ounce, 30 grams

“ W ” Suffix Designates Wire Leads
No Suffix Designates faston Terminals
All Models are Available on B(Height)=7.62mm Max. Epoxy Case



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	GBPC 25005W	GBPC 2501W	GBPC 2502W	GBPC 2504W	GBPC 2506W	GBPC 2508W	GBPC 25010W	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	25							A
Non-repetitive Peak Forward Surge Current at Rated Load	300							A
Maximum Forward Voltage per Bridge Element at 12.5A 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 ² t Rating for fusing (t < 8.35ms)	374/664							A ² S
Typical Thermal Resistance per leg (Fig 3) R _{θJC}	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

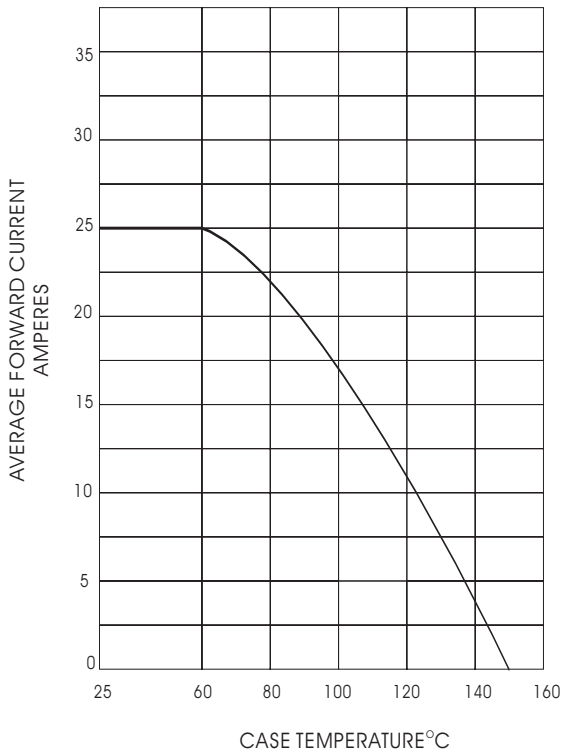


Fig. 1- OUTPUT CURRENT VS. CASE TEMPERATURE
RESISTIVE OR INDUCTIVE LOAD $T_J = 150^\circ\text{C}$

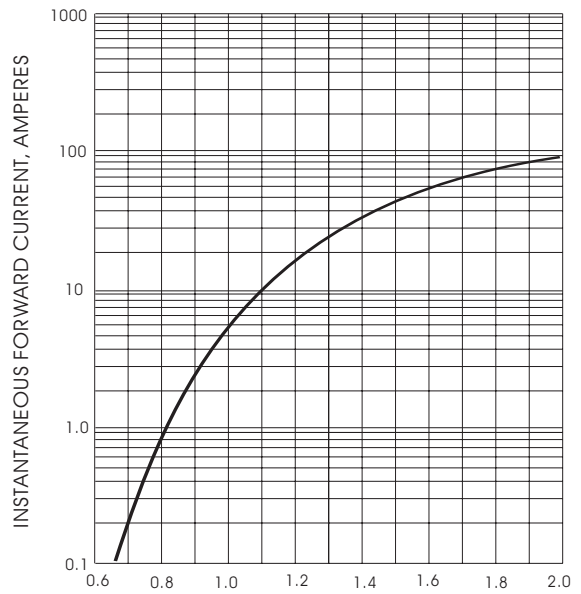


Fig. 2- TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS
AT $T_J = 25^\circ\text{C}$

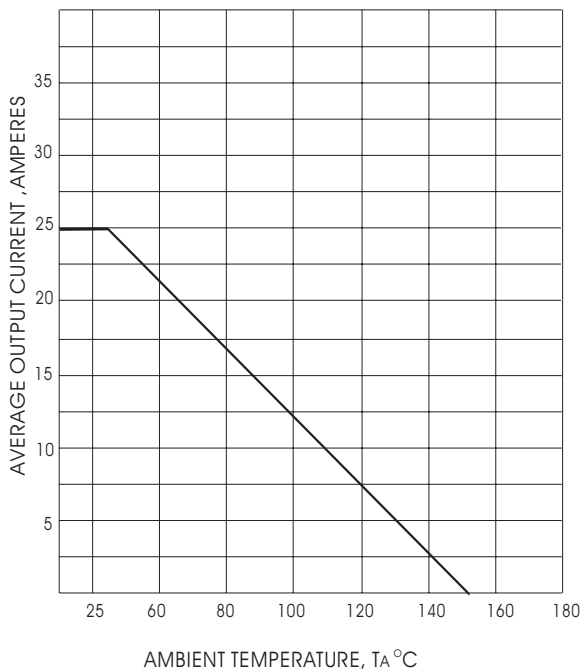


Fig. 3- OUTPUT CURRENT VS. AMBIENT TEMPERATURE
RESISTIVE OR INDUCTIVE LOAD
BRIDGE MOUNTED ON A 8" x 8" ALUMINUM PLATE 25" THICK

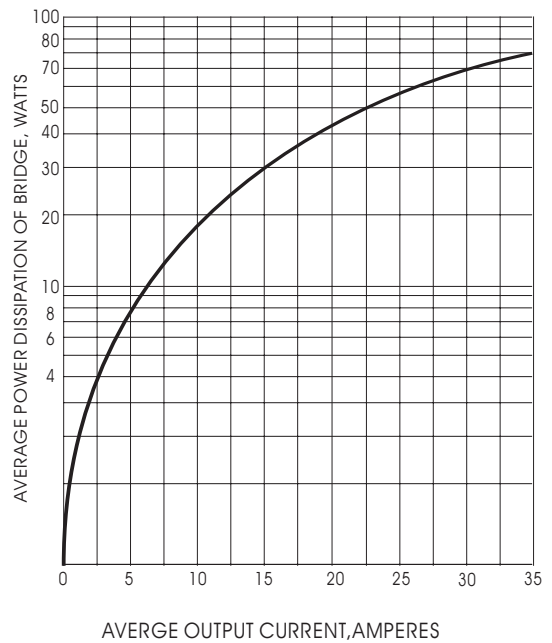


Fig. 4- POWER DISSIPATION VS. AVERAGE OUTPUT
CURRENT RESISTIVE OR INDUCTIVE LOAD
 $T_J = 150^\circ\text{C}$