



# DATA SHEET

## GBPC25005~GBPC2508

### GLASS PASSIVATED BRIDGE RECTIFIER

**VOLTAGE** 50 to 800 Volts **CURRENT** 25 Amperes

**GBPC** Unit:inch(mm)

#### FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- The plastic package has Underwriters Laboratory Flammability Classification 94V-O.
- Both normal and Pb free product are available :
  - Normal : 80~95% Sn, 5~20% Pb
  - Pb free: 99% Sn above

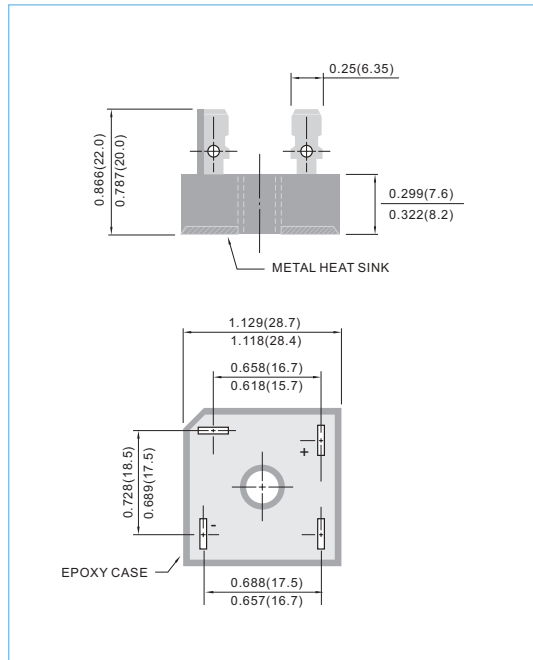
#### MECHANICAL DATA

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

Mounting position: Any

Weight: 1 ounce, 30 grams

Terminals: Plated . 25" FASTON



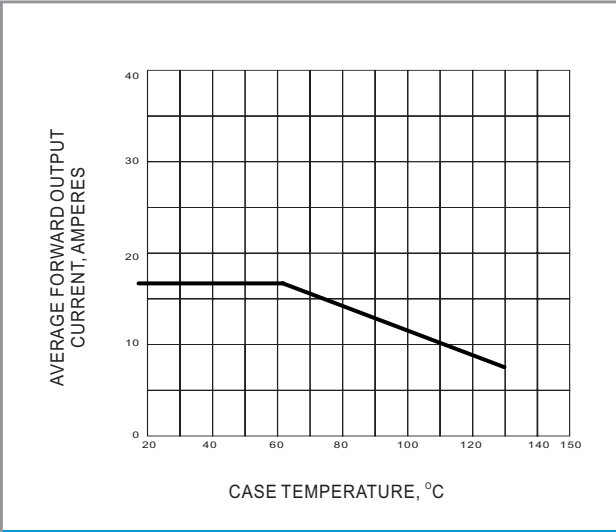
#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

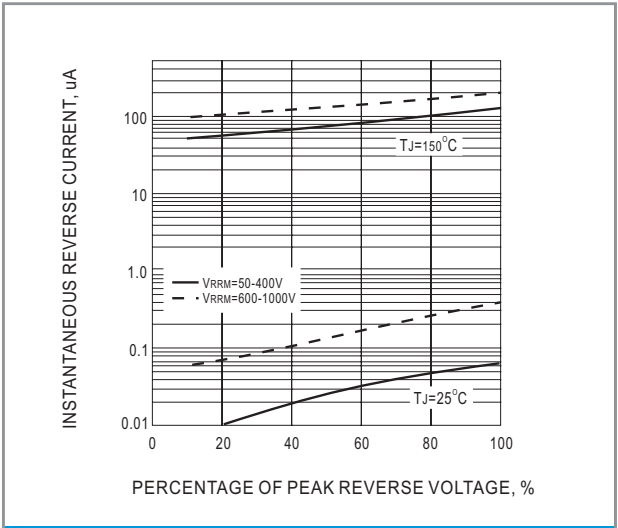
PARAMETER	SYMBOL	GBPC 25005	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	V
Maximum Average Forward Current for Resistive Load at $T_C = 55$	$I_{AV}$	25						A
Non-repetitive Peak Forward Surge Current at Rated Load	$I_{FSM}$	300						A
Maximum Forward Voltage Drop per Element at 12.5A Specified Current	$V_F$	1.2						V
Maximum Reverse Leakage Current at Rated @ $T_A = 25$ DC Blocking Voltage per element @ $T_A = 100$	$I_R$	10.0 1000						$\mu A$
$I^2 T$ Rating for fusing ( $t < 8.35ms$ )	$I^2 t$	374						$A^2 sec$
Typical Thermal Resistance per leg	$R_{\theta JC}$	2						/ W
Operating Temperature Range	$T_J$	-50 to + 150						
Storage Temperature Range	$T_A$	-50 to + 150						



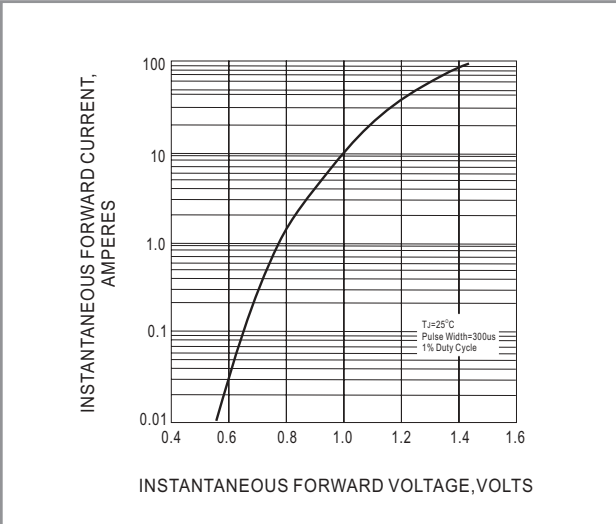
**RATING AND CHARACTERISTIC CURVES**



**Fig.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**Fig.2 TYPICAL REVERSE CHARACTERISTICS**



**Fig.3 TYPICAL FORWARD CHARACTERISTIC**