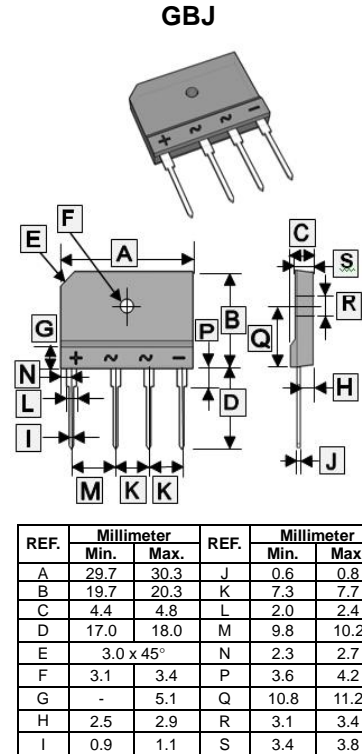


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has Underwriters Laboratory flammability classification 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number							Unit
		GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heat sink) ²	$I_{(AV)}$	15							A
Rectified Current @ $T_C=100^\circ\text{C}$ (without heat sink)		3.2							
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	240							A
Maximum Forward Voltage @ 7.5A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_J=25^\circ\text{C}$	10							μA
	$T_J=125^\circ\text{C}$	500							
I^2t Rating for Fusing ($t<8.3\text{ms}$)	I^2t	240							A^2s
Typical Junction Capacitance Per Element ¹	C_J	60							pF
Typical Thermal Resistance	$R_{\theta JC}$	0.8							$^\circ\text{C}/\text{W}$
Operating and Storage temperature range	T_J, T_{STG}	-55~150							$^\circ\text{C}$

Notes :

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 300mm*300mm*1.6mm Cu plate heat sink.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

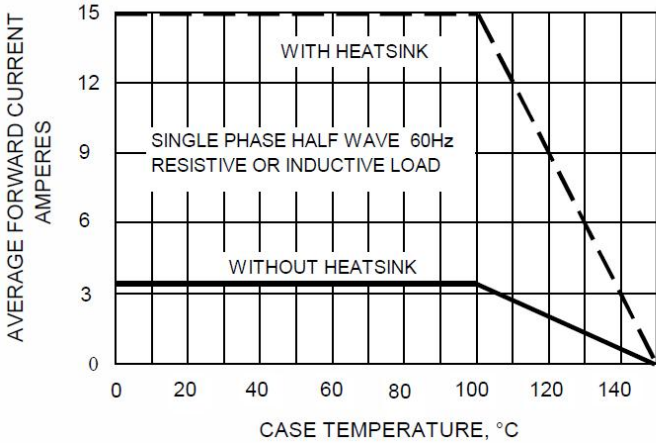


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

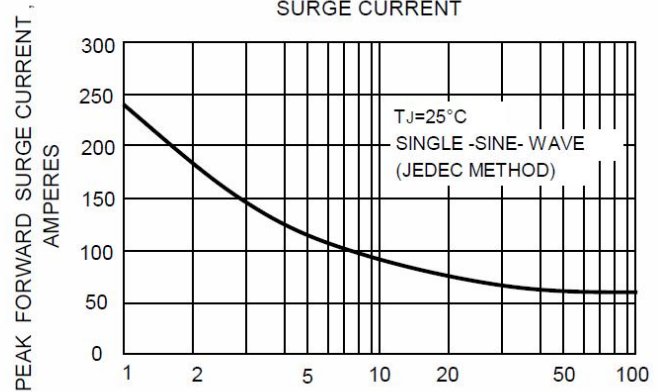


FIG.3-TYPICAL JUNCTION CAPACITANCE

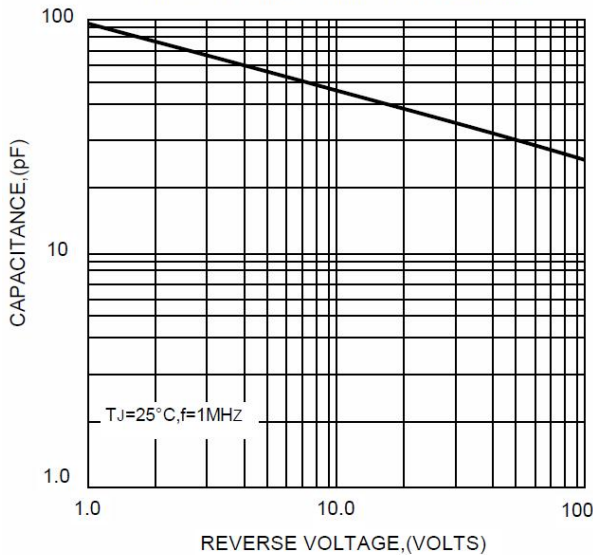


FIG.4-TYPICAL FORWARD CHARACTERISTICS

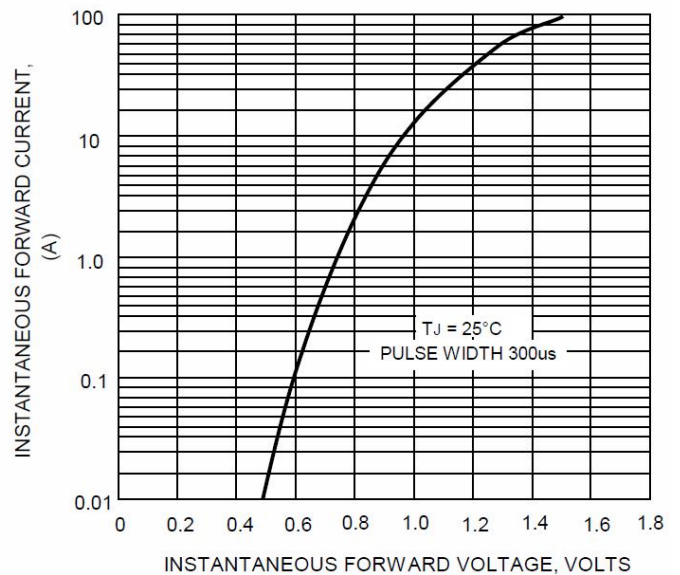


FIG.5-TYPICAL REVERSE CHARACTERISTICS

