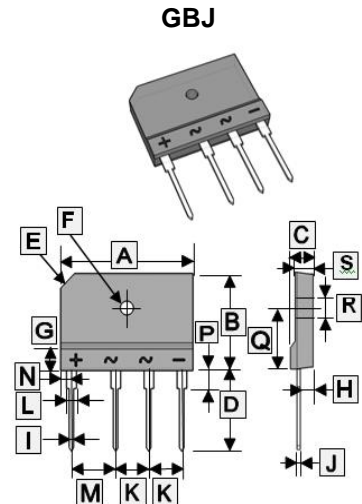


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## 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



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	29.7	30.3	J	0.6	0.8
B	19.7	20.3	K	7.3	7.7
C	4.4	4.8	L	2.0	2.4
D	17.0	18.0	M	9.8	10.2
E	3.0 x 45°		N	2.3	2.7
F	3.1	3.4	P	3.6	4.2
G	-	5.1	Q	10.8	11.2
H	2.5	2.9	R	3.1	3.4
I	0.9	1.1	S	3.4	3.8

## 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) <sup>2</sup>	$I_{(AV)}$	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							$\mu\text{A}$
	$T_J=125^\circ\text{C}$	500							
$I^2t$ Rating for Fusing ( $t<8.3\text{ms}$ )	$I^2t$	240							$\text{A}^2\text{s}$
Typical Junction Capacitance Per Element <sup>1</sup>	$C_J$	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

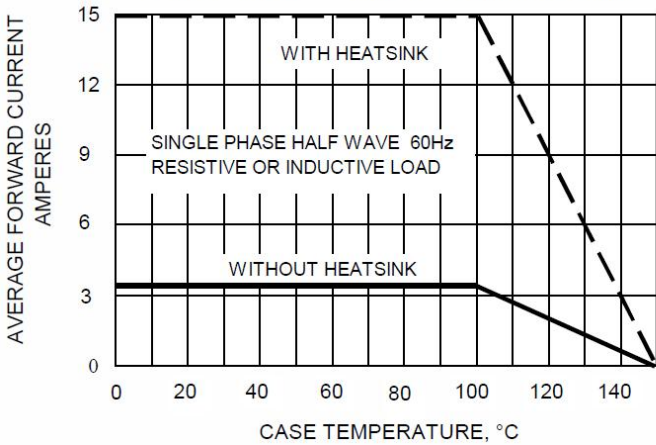


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

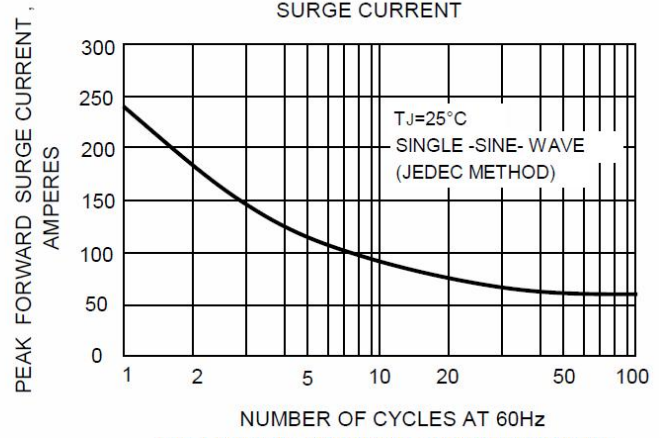


FIG.3-TYPICAL JUNCTION CAPACITANCE

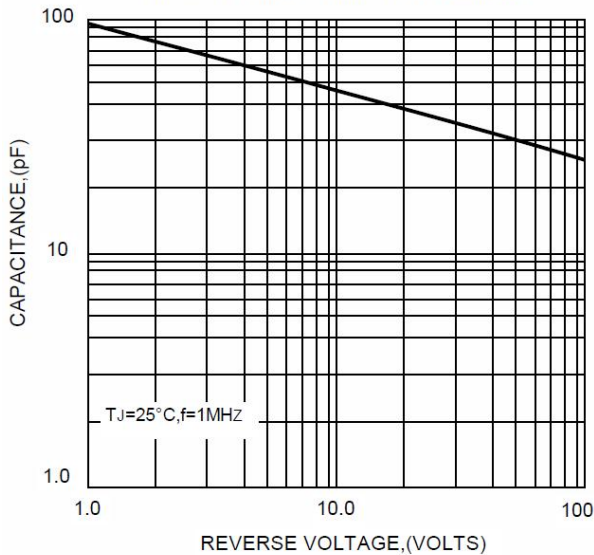


FIG.4-TYPICAL FORWARD CHARACTERISTICS

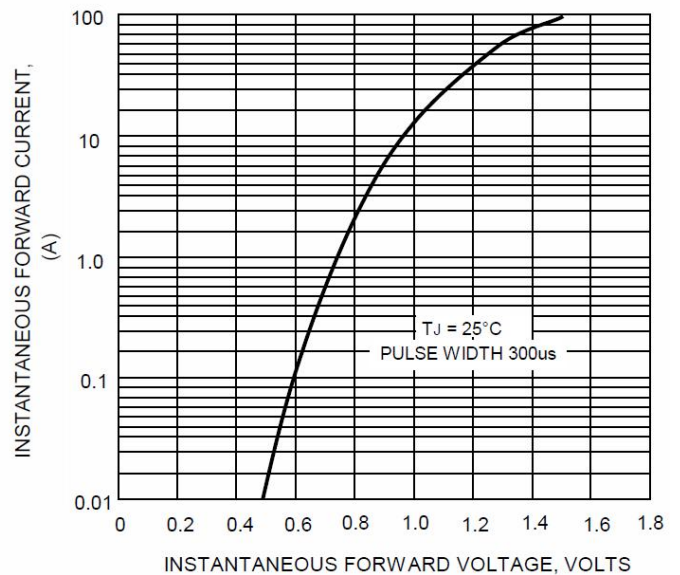


FIG.5-TYPICAL REVERSE CHARACTERISTICS

