

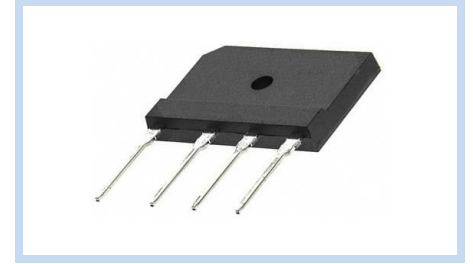
Single-Phase Bridge Rectifier GBJ Package

GBJ25005 to GBJ 25010

MERITEK

FEATURE

- Glass passivated
- Reverse Voltage: 50 to 1000 V
- Forward Current: 25.0 A
- High surge current capability
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- UL/cUL safety approved: certification No: E223027



ELECTRICAL CHARACTERISTICS

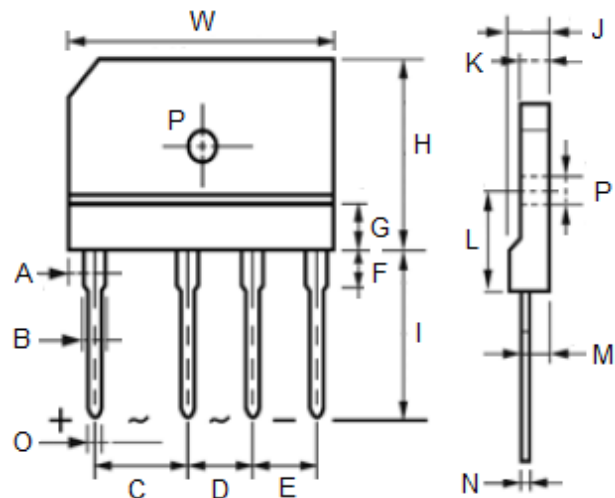


Parameter	Symbols	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	Unit
Maximum Recercent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	25.0 at $T_C=100^{\circ}C$ with Heatsink							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	300.0							A
Maximum Forward Voltage at 12.5A DC and 25°C	V_F	1.05							V
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	10.0 at $T_A=25^{\circ}C$, 500 at $T_A=125^{\circ}C$							μA
Typical Junction Capacitance applied reverse voltage of 4.0 VDC at 1 MHz	C_J	85							pF
Typical Thermal Resistance, Device Mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.	$R_{\theta JA}$	0.6							$^{\circ}C/W$
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							$^{\circ}C$

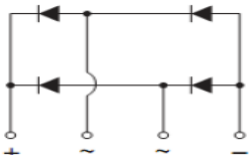
Rating at 25°C, ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

DIEMSIONS

Item	Milimeters		Item	Milimeters	
	Min.	Max.		Min.	Max.
W	29.7	30.3	H	17.7	20.3
A	2.3	2.7	I	17.0	18.0
B	2.0	2.4	J	4.4	4.8
O	0.9	1.1	K	3.4	3.8
C	9.8	10.2	L	10.8	11.2
D	7.3	7.7	M	2.5	2.9
E	7.3	7.7	N	0.6	0.8
F	3.8	4.2	P	3.1	3.4
G	5.0	-			



FUNCTIONAL DIAGRAM



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RATINGS AND CHARACTERISTICS CURVES

Fig.1 Maximum Current Derating Curve

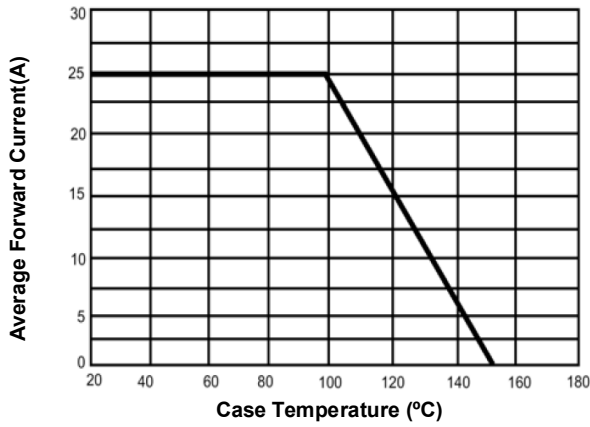


Fig 2. Maximum Non-Repetitive Forward Surge Current Per Bridge Element

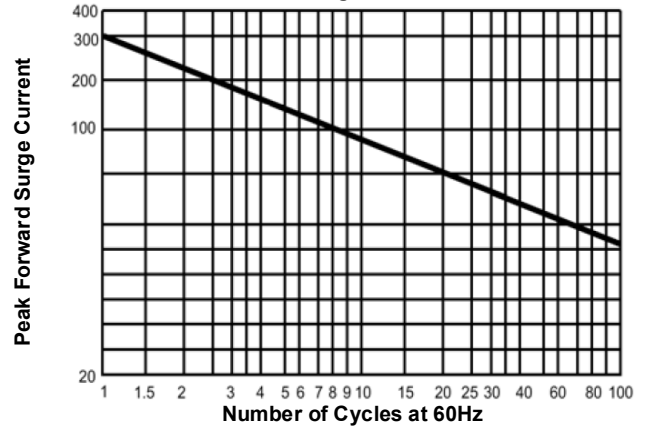


Fig 3. Typical Reverse Characteristic Per Bridge Element

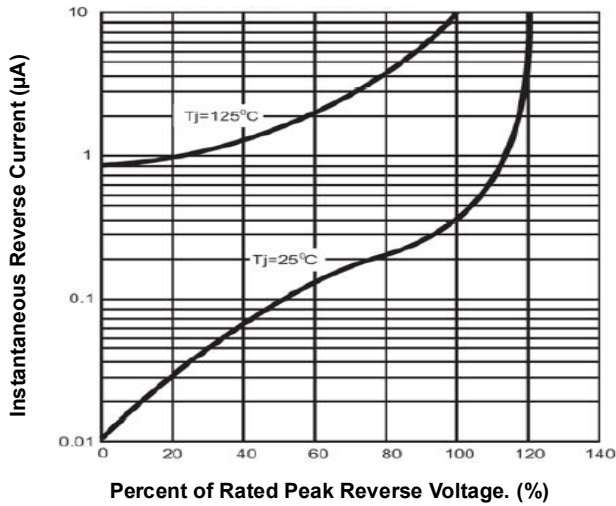


Fig 4. Typical Forward Characteristic Per Bridge Element

