

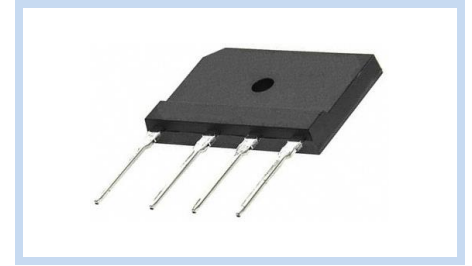
# Single-Phase Bridge Rectifier GBJ Package

GBJ15005 to GBJ15010

MERITEK

## FEATURE

- Glass passivated
- Reverse Voltage: 50 to 1000 V
- Forward Current: 15.0 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

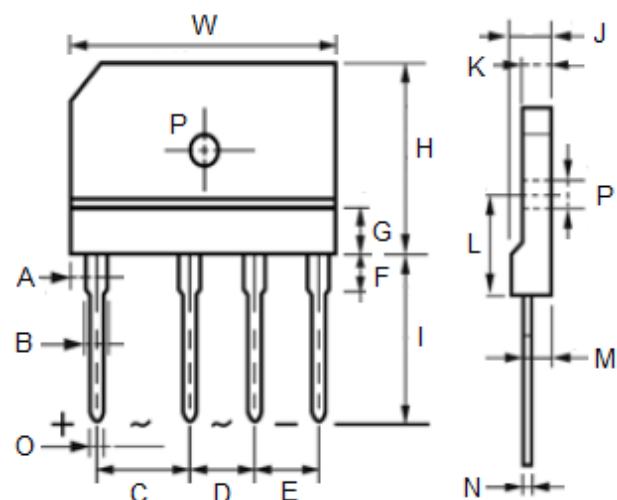


Parameter	Symbols	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 15010	Unit
Maximum Recercent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	15.0 at $T_C=100^{\circ}C$							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200.0							A
Maximum Forward Voltage at 2.0A 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 $T_A=125^{\circ}C$							$\mu A$
Typical Junction Capacitance applied reverse voltage of 4.0 VDC at 1 MHz.	$C_J$	60							pF
Typical Thermal Resistance, with Device Mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.	$R_{\theta JA}$	0.8							$^{\circ}C/W$
Operating and Storage Temperature Range	$T_J, T_{stg}$	-55 to +150							$^{\circ}C$

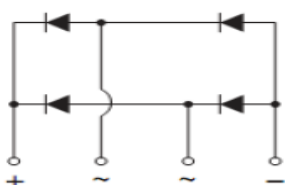
Rating at 25°C, ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

## 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



# Single-Phase Bridge Rectifier GBJ Package

GBJ15005 to GBJ15010

MERITEK

## RATINGS AND CHARACTERISTICS CURVES

Fig.1 Maximum Current Derating Curve

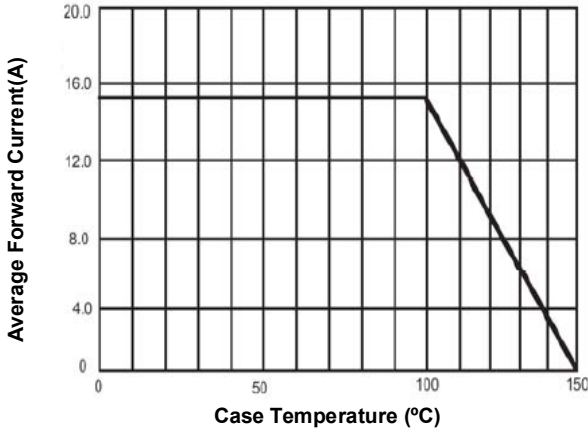


Fig 2. Maximum Non-Repetitive Forward Surge Current Per Bridge Element

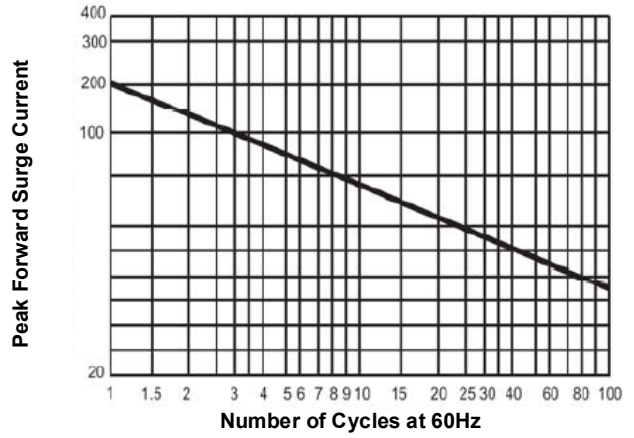


Fig 3. Typical Reverse Characteristic Per Bridge Element

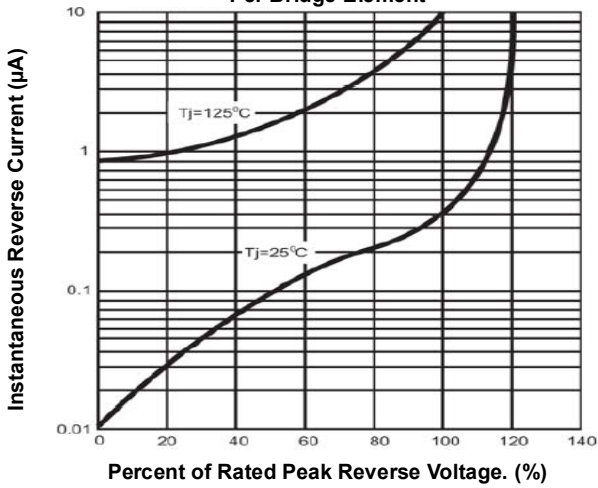
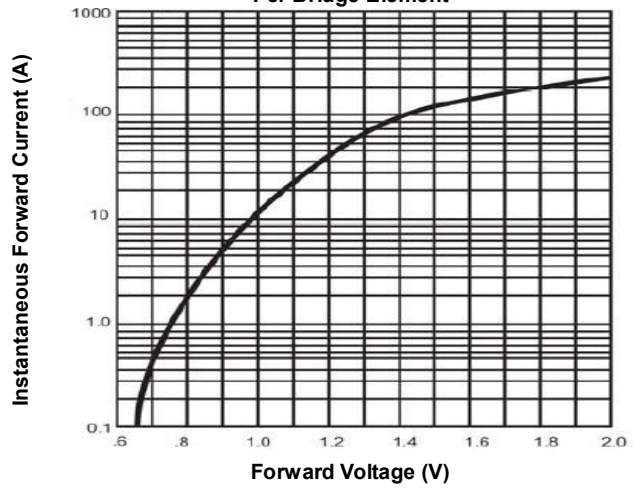


Fig 4. Typical Forward Characteristic Per Bridge Element



Typical Transient Thermal Impedance

