

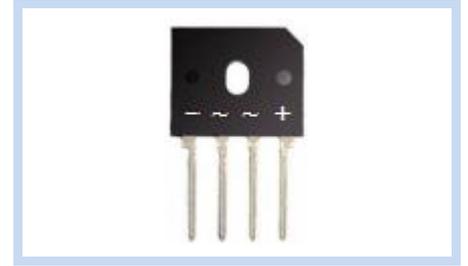
Single-Phase Bridge Rectifier 25A GBJ Package

GBJ25xx series

MERITEK

FEATURE

- Average Forward Rectified Output Current 25A
- Repetitive Reverse Voltage: 50~1000V
- Surge Overload Ratings to 300A
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



ELECTRICAL CHARACTERISTICS

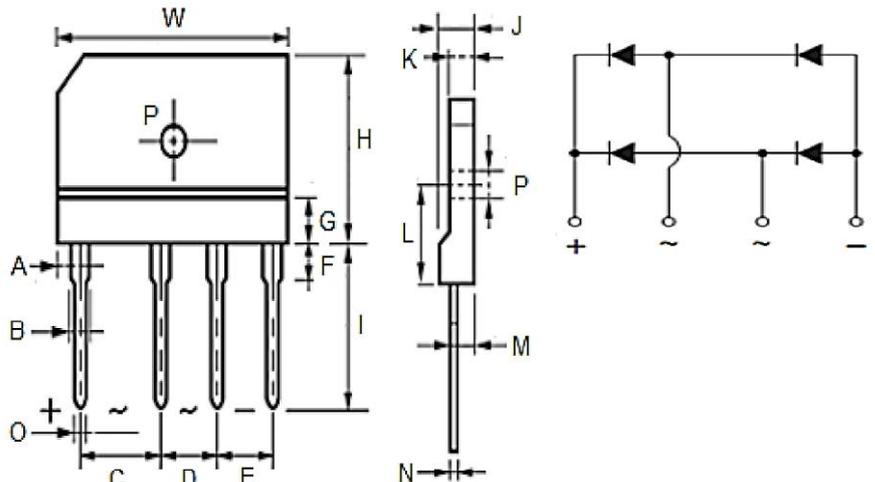
Parameter	Code	GBJ25 005	GBJ25 01	GBJ25 02	GBJ25 04	GBJ25 06	GBJ25 08	GBJ25 10	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$T_C=100^\circ\text{C}$ with Heatsink	I_F						25	A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated load (JEDEC Method)		I_{FSM}						300	A
Maximum Instantaneous Forward Voltage Drop per Diode	$I_F=12.5\text{A}$	V_F						1.05	V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	$T_A=25^\circ\text{C}$	I_R						10.0	μA
	$T_A=125^\circ\text{C}$							500	
Typical Junction Capacitance	$V_R=4V_{DC}$ at 1MHz	C_J						85	pF
Typical Thermal Resistance per Element		$R_{\theta JC}$						0.6	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range		T_J, T_{STG}						-55~150	$^\circ\text{C}$

Note:

1. Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz. For Capacitive load derate current by 20%.
2. Thermal Resistance fromn Junction to Case with device mounted on 300mm x 300mm x 1.6mm Cu plate heatsink.

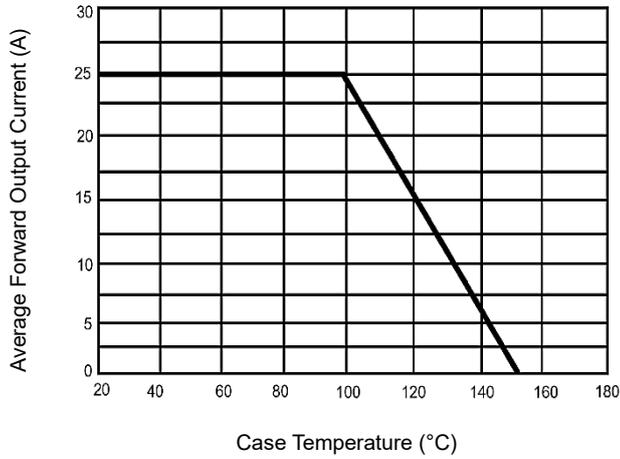
DIMENSION AND PIN CONFIGURATION

Item	Min. (mm)	Max. (mm)
A	2.30	2.70
B	2.00	2.40
C	9.80	10.20
D	7.30	7.70
E	7.30	7.70
F	3.80	4.20
G	5.00	
H	17.70	20.30
I	17.00	18.00
J	4.40	4.80
K	3.40	3.80
L	10.80	11.20
M	2.50	2.90
N	0.60	0.80
O	0.90	1.10
P	3.10	3.40
W	29.70	30.30

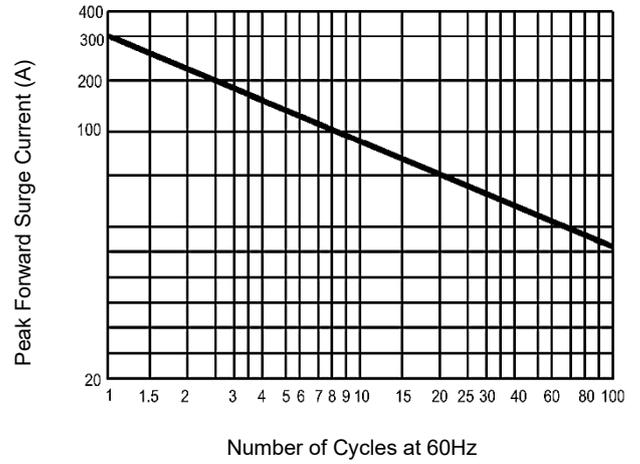


RATING AND CHARACTERISTIC CURVES

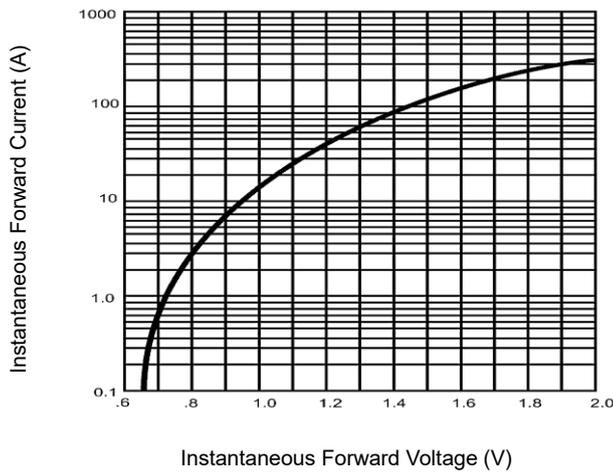
Derating Curve for Output Rectified Current



Maximum Non-Repetitive Peak Forward Surge Current



Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics

