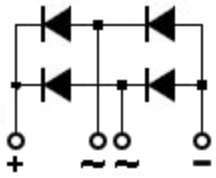
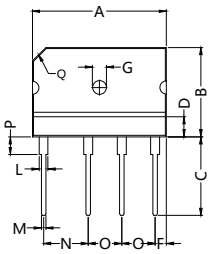
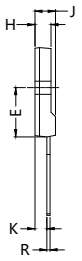
GBJ1512

Single Phase Bridge Rectifiers



Dimensions GBJ





Dim.	Millimeter		Dim.	Millimeter	
	Min.	Max.		Min.	Max.
A	29.70	30.30	K	2.50	2.90
B	19.70	20.30	L	2.00	2.40
C	17.0	18.0	M	0.90	1.10
D	4.70	4.90	N	9.80	10.20
E	10.80	11.20	O	7.30	7.70
F	2.30	2.70	P	3.80	4.20
ØG	Ø3.00	Ø3.4	Q	-	C3
H	3.40	3.80	R	0.80	1.00
J	4.40	4.80			

	V_{RRM}	V_{RWS}	V_{DC}
	V	V	V
GBJ15005	**50**	**35**	**50**
GBJ1502	**200**	**140**	**200**
GBJ1504	**400**	**280**	**400**
GBJ1506	**600**	**420**	**600**
GBJ1508	**800**	**560**	**800**
GBJ1512	**1200**	**840**	**1200**
GBJ1516	**1600**	**1120**	**1600**

Symbol	Characteristics	Maximum Ratings	Unit
$I_{(AV)}$	Maximum Average Forward (With Heatsink Note 2) Rectified Current @T_C=100°C (Without Heatsink)	15.0 3.2	A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	240	A
P_{RSM}	Per diode chip, T_{VJ} = 25°C, t_p = 10 μs	2.4	KW
V_F	Maximum Forward Voltage At 7.5A DC	1.05	V
I_R	Maximum DC Reverse Current @T_J=25°C At Rated DC Blocking Voltage @T_J=125°C	10 500	uA
I^2t	I^2t Rating For Fusing (t < 8.3 ms)	240	A^2S
C_J	Typical Junction Capacitance Per Element (Note 1)	60	pF
$R_{\theta JC}$	Typical Thermal Resistance (Note 2)	0.8	°C/W
T_J	Operating Temperature Range	-55 to +150	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

NOTES: 1. Measured At 1.0MHz And Applied Reverse Voltage Of 4.0V DC.

2. Device Mounted On 300mm x 300mm x 1.6mm Cu Plate Heatsink.

3. Isolation Votage > 2500V_{RMS} AC @ 60 sec.

FEATURES

* Rating to 1600V 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
* RoHS compliance
* UL File E310749
* Excellent Avalanche Behaviour

MECHANICAL DATA

* Polarity: Symbols molded on body
* Weight: 7 grams
* Mounting position: Any

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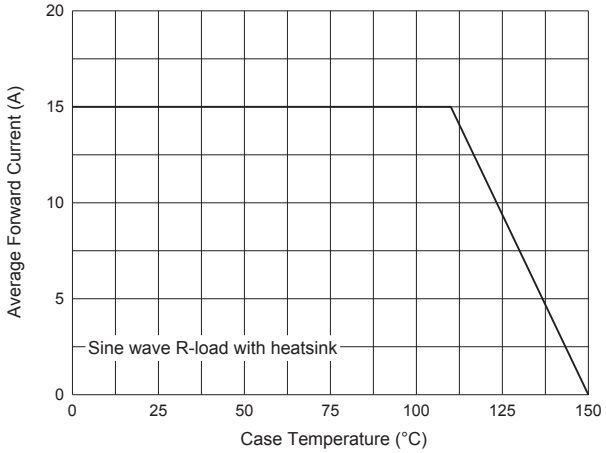

Fig. 1 - Forward Current Derating Curve

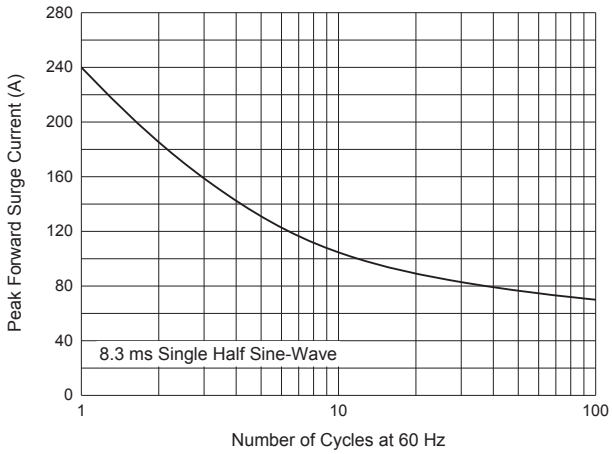

Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

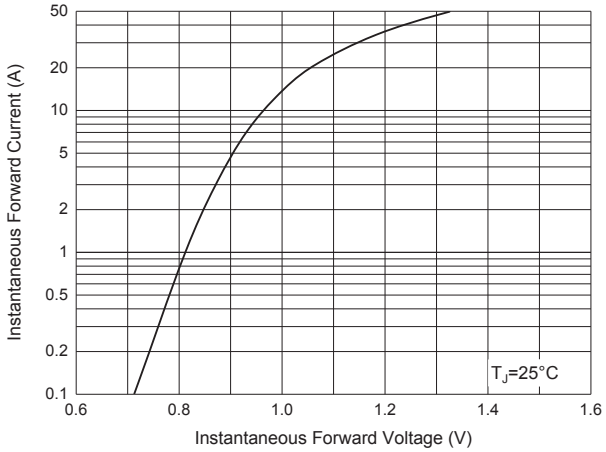

Fig. 3 - Typical Instantaneous Forward Characteristics

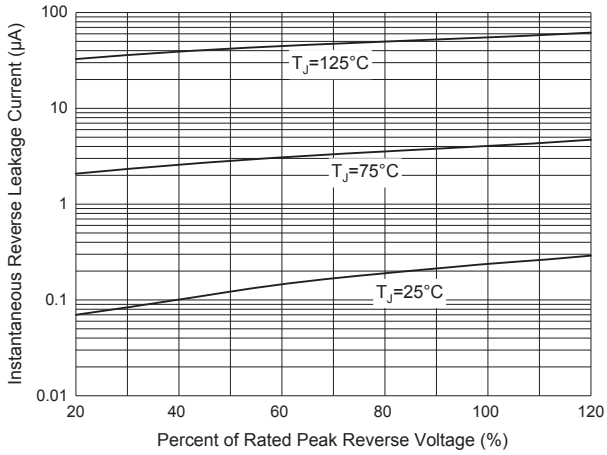

Fig. 4 - Typical Reverse Leakage Characteristics

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