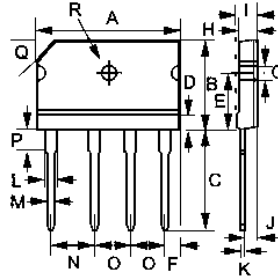


# GBJ20005 thru GBJ2016

## Single Phase Bridge Rectifiers



Dimensions GBJ(RS6M)



GBJ		
DIM.	MIN.	MAX.
A	29.70	30.30
B	19.70	20.30
C	17.0	18.0
D	4.70	4.90
E	10.80	11.20
F	2.30	2.70
G	3.10	3.40
H	3.40	3.80
I	4.40	4.80
J	2.50	2.90
K	0.60	0.80
L	2.00	2.40
M	0.90	1.10
N	9.80	10.20
O	7.30	7.70
P	3.80	4.20
Q	(3.0) x 45°	
R	3.10 ∅	3.40 ∅

All Dimensions in millimeter

	V <sub>RRM</sub> V	V <sub>RMS</sub> V	V <sub>DC</sub> V
GBJ20005	50	35	50
GBJ2002	200	140	200
GBJ2004	400	280	400
GBJ2006	600	420	600
GBJ2008	800	560	800
GBJ2012	1200	840	1200
GBJ2016	1600	1120	1600

Symbol	Characteristics	Maximum Ratings	Unit
I <sub>AV</sub>	Maximum Average Forward (With Heatsink Note 2) Rectified Current @T <sub>c</sub> =100°C (Without Heatsink)	20.0 3.6	A
I <sub>FSM</sub>	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	240	A
V <sub>F</sub>	Maximum Forward Voltage At 10.0A DC	1.05	V
I <sub>R</sub>	Maximum DC Reverse Current @T <sub>J</sub> =25°C At Rated DC Blocking Voltage @T <sub>J</sub> =125°C	10 500	uA
I <sup>2</sup> t	I <sup>2</sup> t Rating For Fusing (t < 8.3 ms)	240	A <sup>2</sup> S
C <sub>J</sub>	Typical Junction Capacitance Per Element (Note 1)	60	pF
R <sub>θJC</sub>	Typical Thermal Resistance (Note 2)	0.8	°C/W
T <sub>J</sub>	Operating Temperature Range	-55 to +150	°C
T <sub>STG</sub>	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.

### 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
- \* RoHS compliant

### MECHANICAL DATA

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



# GBJ20005 thru GBJ2016

## Single Phase Bridge Rectifiers

FIG.1 - FORWARD CURRENT DERATING CURVE

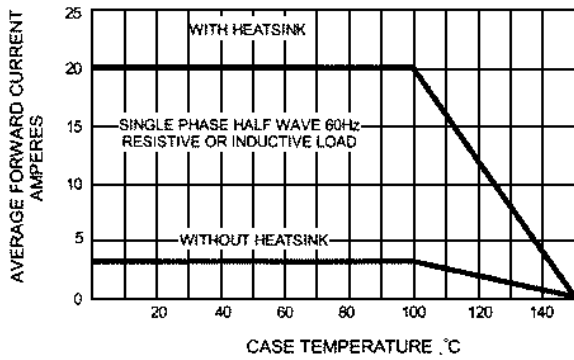


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

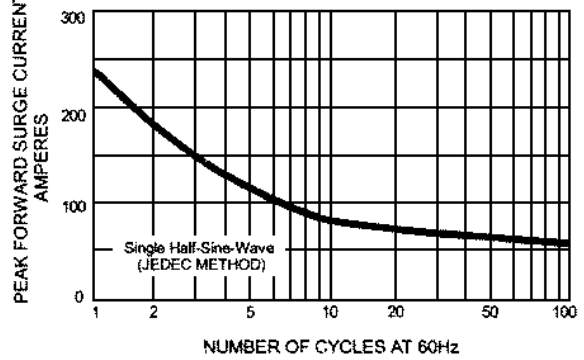


FIG.3 - TYPICAL JUNCTION CAPACITANCE

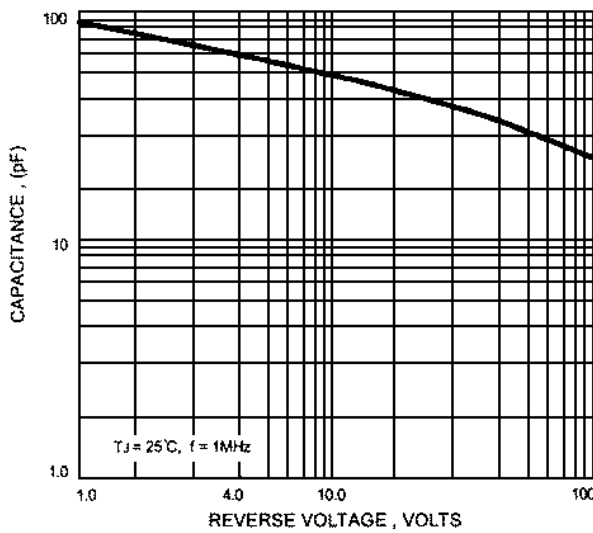


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

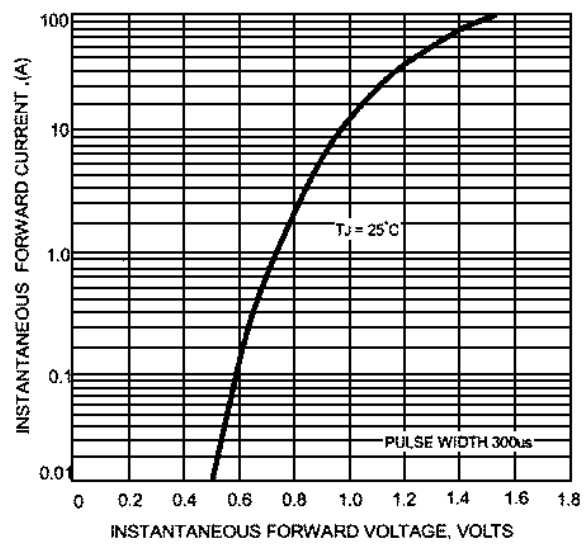


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

