Micro Commercial Components
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GBJ15005 THRU GBJ1510

15 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts

Features

- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 0.8°C/W J to C (With heatsink)
- Typical Thermal Resistance 3.5°C/W J to L (Without heatsink)
- Typical Thermal Resistance 12°C/W J to A (Without heatsink)
- UL Recognized File # E165989; Mounting torque: 5in-lbs.
- ESD Voltage: HBM: 4KV
  MM: 400V
  CDM: 800V

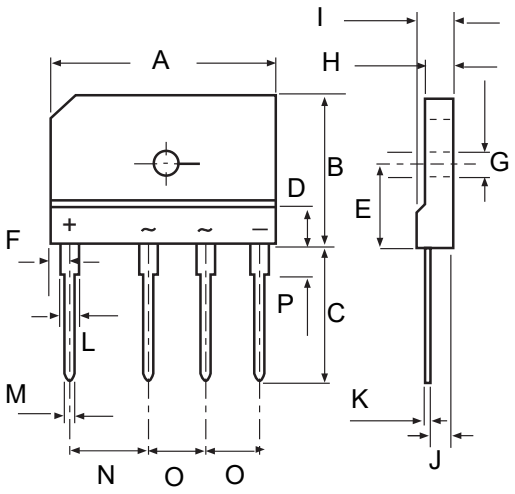
MCC Catalog Number	Device Marking	Maximum Reccurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBJ15005	GBJ15005	50V	35V	50V
GBJ1501	GBJ1501	100V	70V	100V
GBJ1502	GBJ1502	200V	140V	200V
GBJ1504	GBJ1504	400V	280V	400V
GBJ1506	GBJ1506	600V	420V	600V
GBJ1508	GBJ1508	800V	560V	800V
GBJ1510	GBJ1510	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	15 A	Tc = 110°C
Peak Forward Surge Current	I_{FSM}	240A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.0V	I_{FM} = 7.5A T_J = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 µA 500uA	T_J = 25°C T_J = 125°C
I^2t Rating for fusing	I^2t	$240A^2S$	(t<8.3ms)
Typical Junction Capacitance	C_J	60 pF	Measured at 1.0MHz, V_R=4.0V

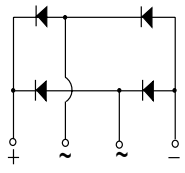
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a

GBJ



DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
A	1.170	1.190	29.70	30.30	
B	.780	.800	19.70	20.30	
C	.670	.710	17.00	18.00	
D	.019	.019	4.70	4.90	
E	.430	.440	10.80	11.20	
F	.090	.110	2.30	2.70	
G	.120	.130	3.10	3.40	
H	.130	.150	3.40	3.80	
I	.170	.190	4.40	4.80	
J	.100	.110	2.50	2.90	
K	.020	.030	0.60	0.80	
L	.080	.090	2.00	2.40	
M	.040	.040	0.90	1.10	
N	.390	.400	9.80	10.20	
O	.290	.300	7.30	7.70	
P	.150	.170	3.80	4.20	

DIMENSIONS



Case Type

RATING AND CHARACTERISTIC CURVES
GBJ15005 thru GBJ1510

FIG.1 - FORWARD CURRENT DERATING CURVE

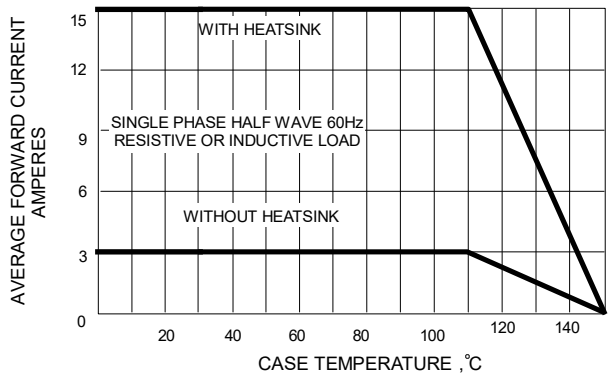


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

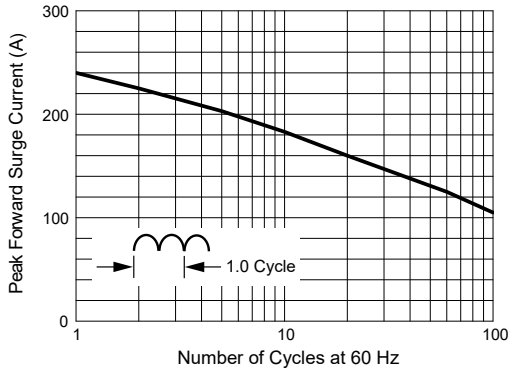


FIG.3 - TYPICAL JUNCTION CAPACITANCE

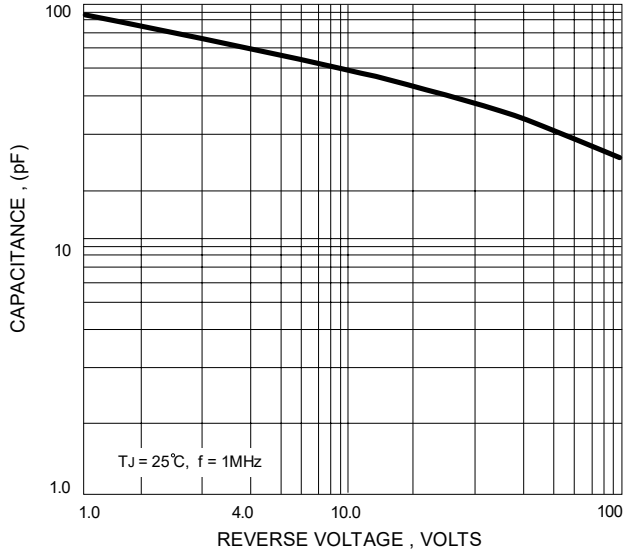


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

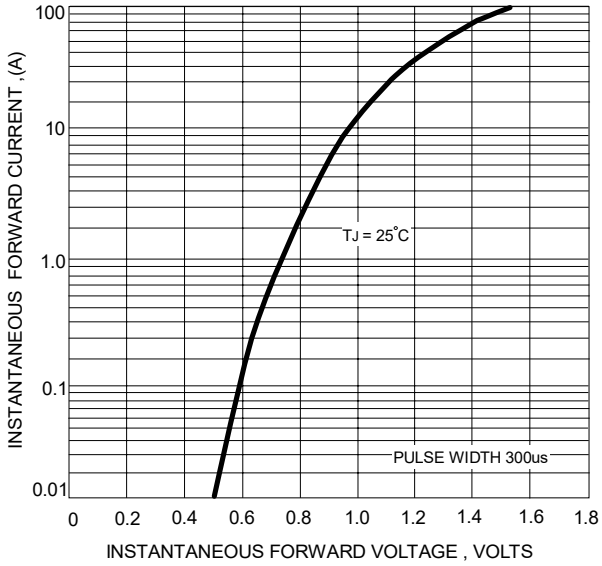
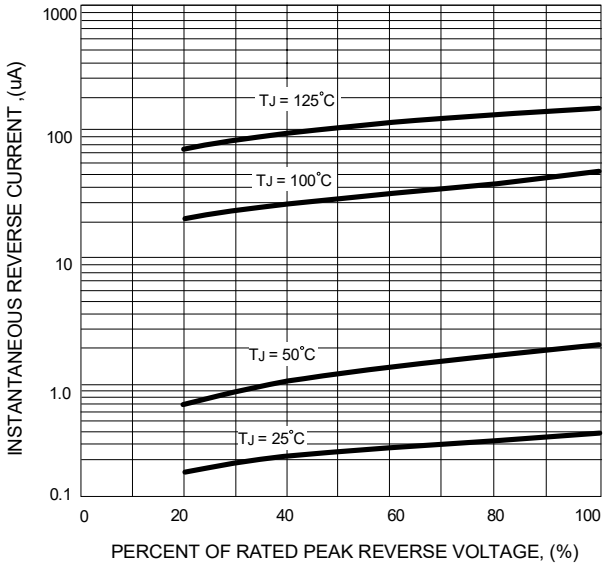


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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Ordering Information :

Device	Packing
Part Number-BP	Bulk: 750pcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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