



# RGBJ15005 thru RGBJ1510

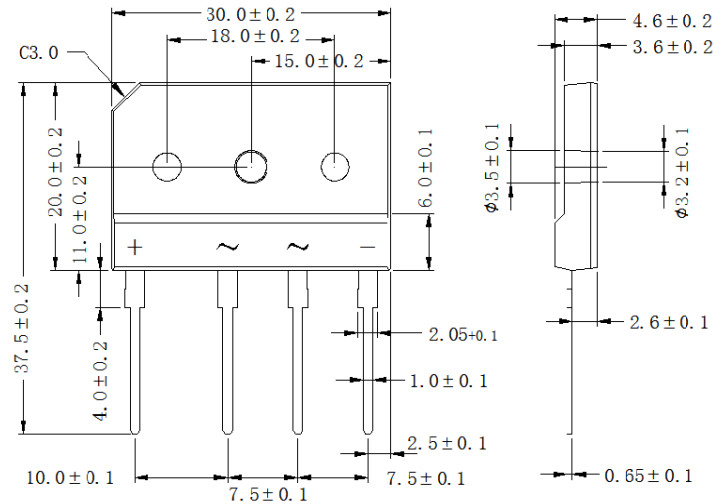
## 15.0A, Fast Recovery Glass Passivated Bridge Rectifier Rectifier Reverse Voltage 50 to 1000V

### Features

- Ideal for printed circuit board mounting
- This series is UL listed under the Recognized Component Index, file number E484648
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High temperature soldering guaranteed 260°C/5 seconds at 5 lbs (2.3kg) tension

### Mechanical Data

Case: Reliable low cost construction utilizing molded plastic technique  
 Terminals: Plated leads solderable per MIL-STD-202, Method 208  
 Mounting Position: Any



Dimensions in inches and (millimeters)

### Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.  
 For Capacitive load derate current by 20%.

CHARACTERISTICS	SYMBOL	RGBJ 15005	RGBJ 1501	RGBJ 1502	RGBJ 1504	RGBJ 1506	RGBJ 1508	RGBJ 1510	UNIT	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	30	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current (with heatsink Note 2) @ T <sub>c</sub> =100°C (without heatsink)	I <sub>(AV)</sub>	15.0							3.2	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	220								A
Maximum reverse recovery time (Note 3)	t <sub>rr</sub>	150				250	500		ns	
Maximum Forward Voltage at 7.5A DC	V <sub>F</sub>	1.3								V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T <sub>J</sub> =25°C @ T <sub>J</sub> =125°C	I <sub>R</sub>	10							500	µA
Typical Thermal Resistance (Note2)	R <sub>θJC</sub>	1.5								°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C

- NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
 2. Device mounted on 300mm\*300mm\*1.6mm cu plate heatsink.  
 3. Reverse recovery time test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A

**Rating and Characteristic Curves** (  $T_A=25^{\circ}\text{C}$  Unless otherwise noted )  
**RGBJ15005 thru RGBJ1510**

FIG.1-FORWARD CURRENT DERATING CURVE

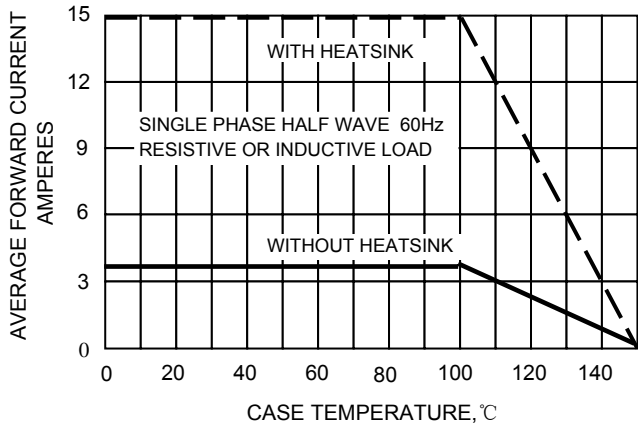


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

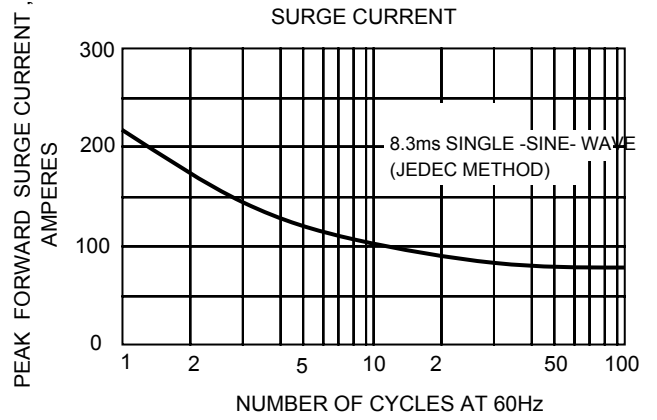


FIG.3-TYPICAL JUNCTION CAPACITANCE

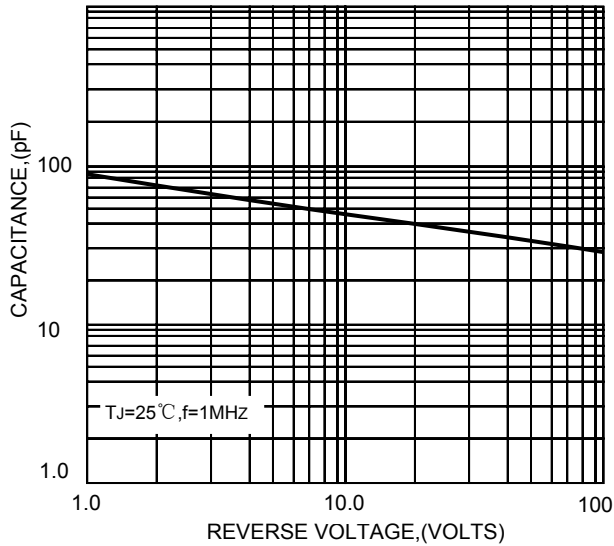


FIG.4-TYPICAL FORWARD CHARACTERISTICS

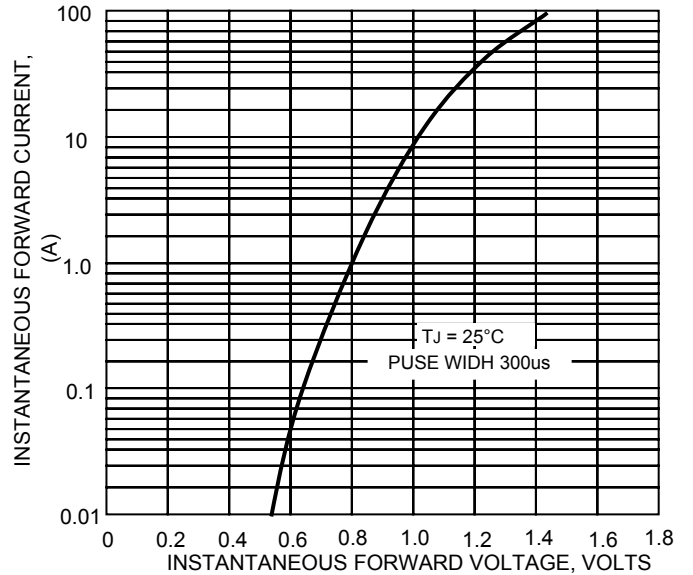


FIG.5-TYPICAL REVERSE

