



RGBJ50005 thru RGBJ5010

50.0A, Fast Recovery Glass Passivated Bridge Rectifier

Rectifier Reverse Voltage 50 to 1000V

Features

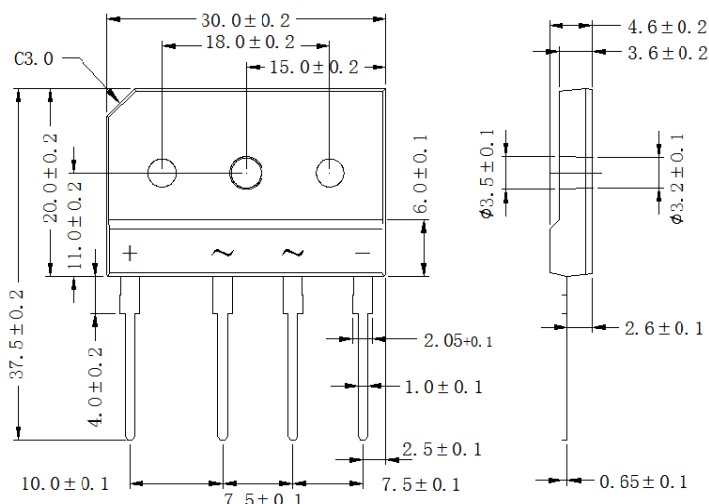
- Ideal for printed circuit board mounting
- This series is UL listed under the Recognized Component Index, file number E484648
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Built-in printed circuit board stand-offs
- High case dielectric strength
- High 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%.

Parameter	Symbol	RGBJ 50005	RGBJ 5001	RGBJ 5002	RGBJ 5004	RGBJ 5006	RGBJ 5008	RGBJ 5010	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note2) Rectified Current @ T C=100C	IF(AV)	50.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	500							A
Maximum reverse recovery time (Note 3)	t _{rr}	150				250	500		ns
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

Electrical Characteristics

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

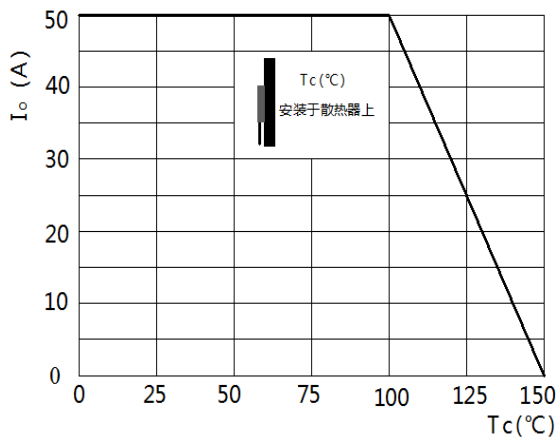
Parameter	Symbol	RGBJ 50005	RGBJ 5001	RGBJ 5002	RGBJ 5004	RGBJ 5006	RGBJ 5008	RGBJ 5010	Unit
Maximum instantaneous forward voltage drop per leg at 25.0A	V _F	1.3							V
Maximum DC reverse current at rated T _A =25°C DC blocking voltage per element T _A =125°C	I _R	10 500							μA

Notes: (1) Thermal resistance from Junction to Ambient on P.C. board mounting.

(2) Device mounted on 300mm*300mm*1.6mm cu plate heatsink.

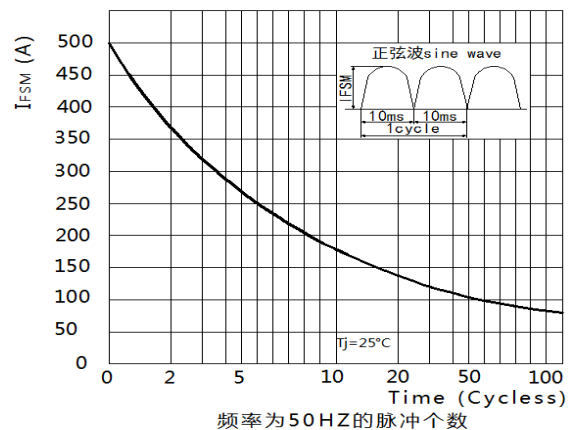
Rating and Characteristic Curves ($T_A = 25^{\circ}\text{C}$ Unless otherwise noted) RGBJ50005 thru RGBJ5010

FIG.1-FORWARD CURRENT DERATING CURVE



CASE TEMPERATURE, °C

FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT



频率为 50 HZ 的脉冲个数

FIG.3-TYPICAL REVERSE

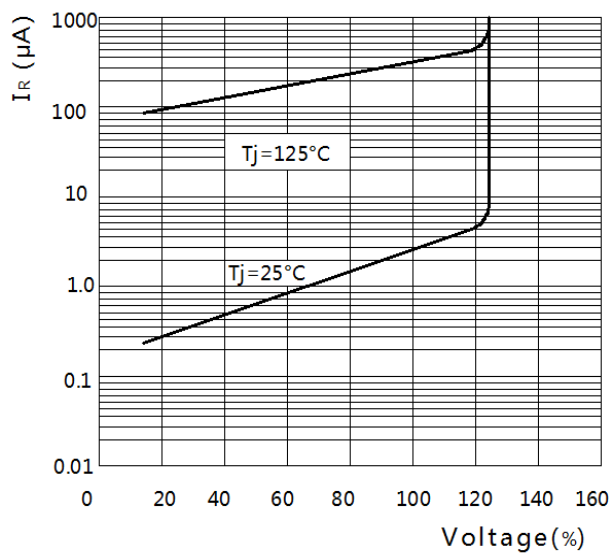


FIG.4-TYPICAL FORWARD CHARACTERISTICS

