

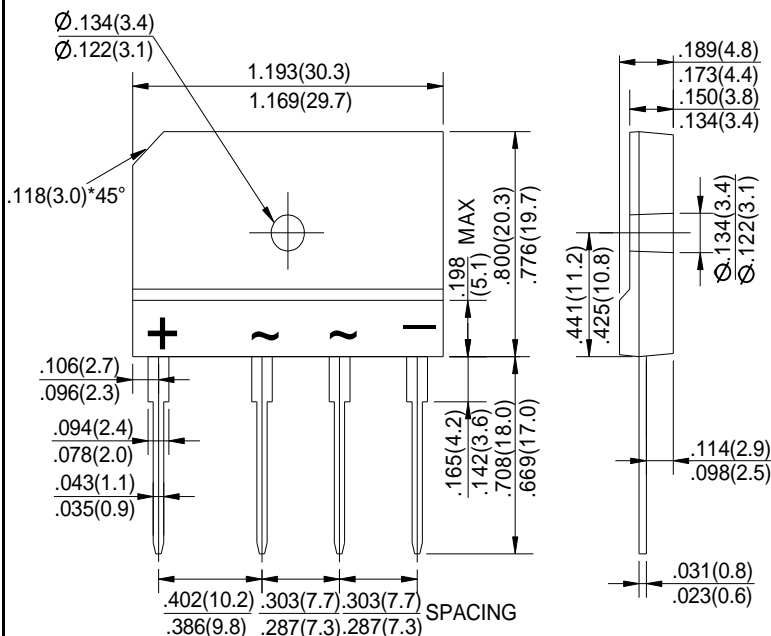
## GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **600** Volts  
FORWARD CURRENT - **10** Amperes

### FEATURES

- Rating to 600V 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
- The plastic material has UL flammability classification 94V-0

**GBJ**



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	GBJ1006U	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	600	V
Maximum Average Forward (with heatsink Note 2) Rectified Current @ T <sub>C</sub> =110°C (without heatsink)	I <sub>(AV)</sub>	10.0 3.5	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	220	A
Typical Forward Voltage at 5.0A DC	V <sub>F</sub>	0.89	V
Maximum Forward Voltage at 5.0A DC	V <sub>F</sub>	0.9	V
Maximum DC Reverse Current @ T <sub>J</sub> =25°C at Rated DC Blocking Voltage @ T <sub>J</sub> =125°C	I <sub>R</sub>	10.0 120	µA
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	200	A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	C <sub>J</sub>	55	pF
Typical Thermal Resistance	R <sub>θJC</sub>	1.4	°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 150mm\*150mm\*1.6mm Cu plate heatsink.  
3. The typical data above is for reference only (典型值仅供参考).

FIG.1-FORWARD CURRENT DERATING CURVE

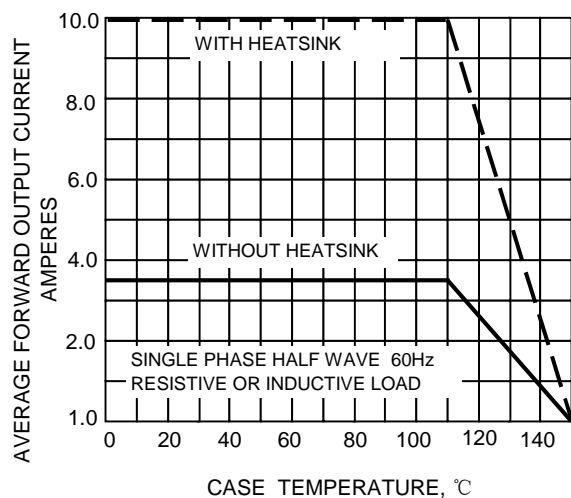


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

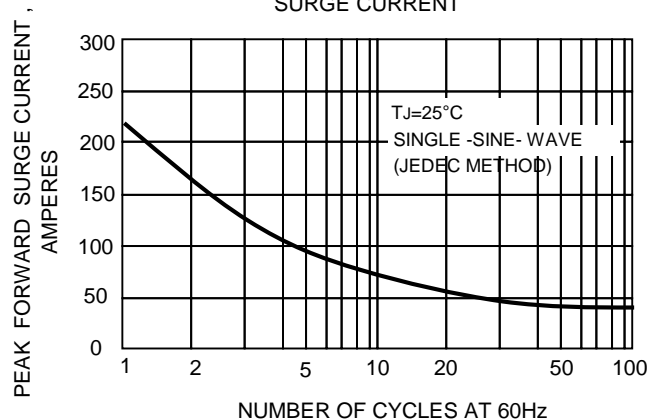


FIG.3-TYPICAL JUNCTION CAPACITANCE

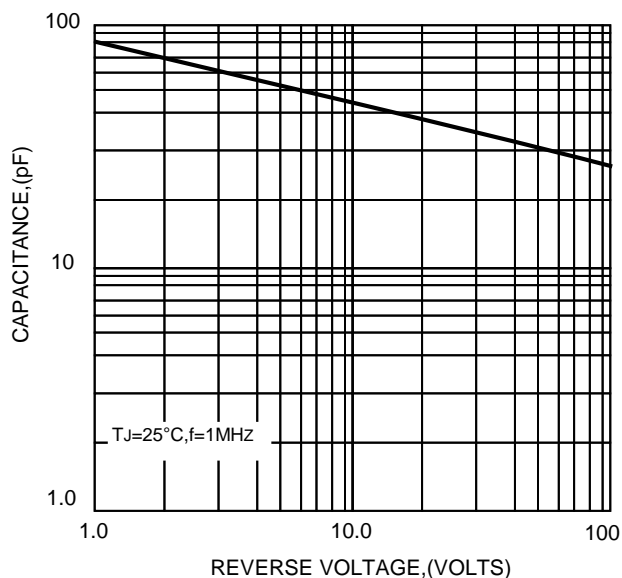


FIG.4-TYPICAL FORWARD CHARACTERISTICS

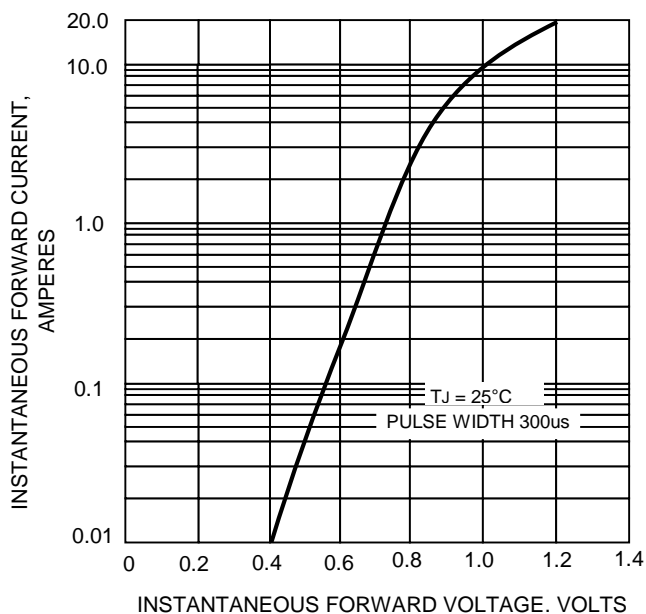
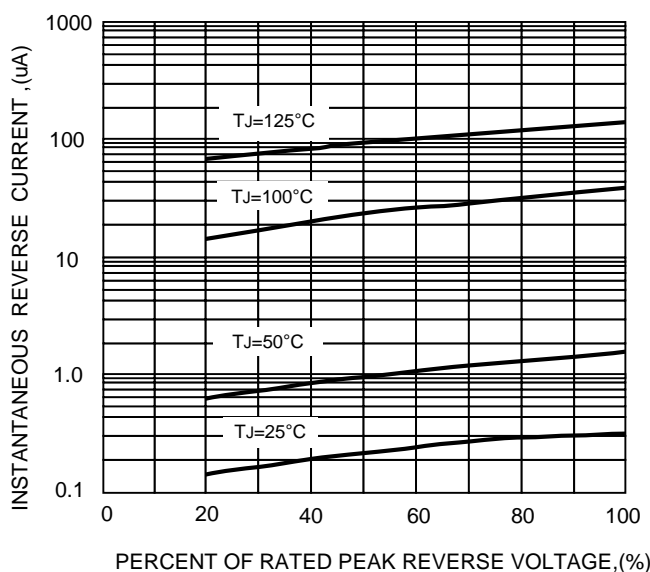


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!