

GBU
 Unit:inch(mm)

FEATURES

- Glass passivated chip junction
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability

MECHANICAL DATA

- Case: Molded plastic, GBU
- Epoxy: UL 94V-O rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- Mounting position: Any
- Weight: 0.15ounce, 4.0gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	GBU502SF	GBU504SF	GBU506SF	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS Voltage	V_{RMS}	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	V
Maximum Average Forward Current:375"(9.5mm)lead length at $T_A=55^{\circ}C$	$I_{F(AV)}$.5			A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load(JEDECmethod)	I_{FSM}	175			A
Maximum Forward Voltage at 5.0A	V_F	0.95.	1.30	.1.70.	V
Maximum DC Reverse Current $T_J=25^{\circ}C$ at Rated DC Blocking Voltage $T_J=125^{\circ}C$	I_R	1.0 300			μA
Maximum Reverse Recovery Time(Note1)	t_{rr}	35			ns
Typical Junction capacitance (Note2)	C_J	65			pF
Typical Junction Resistance(Note3)	$R_{\theta JA}$	20			$^{\circ}C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150			$^{\circ}C$

NOTES:1. Reverse Recovery Test Conditions: $I_F=5A, I_R=1A, I_{rr}=.25A$

2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC

3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

Fig.1-FORWARD CURRENT DERATING CURVE

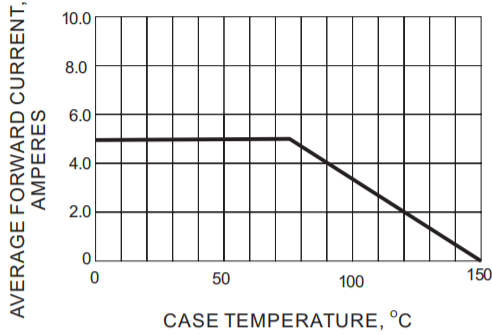


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

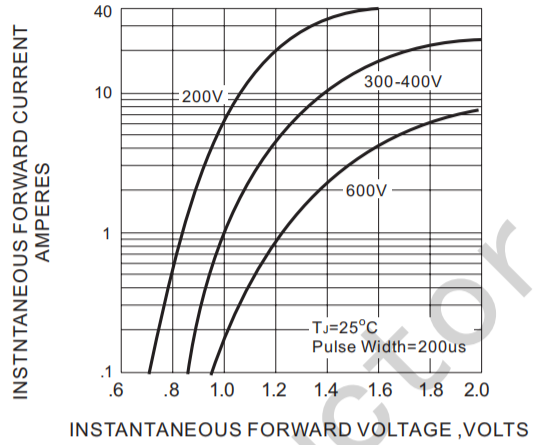


Fig.3-TYPICAL REVERSE CHARACTERISTICS

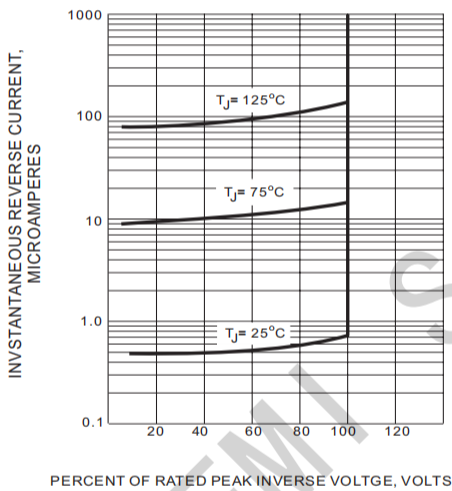


Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

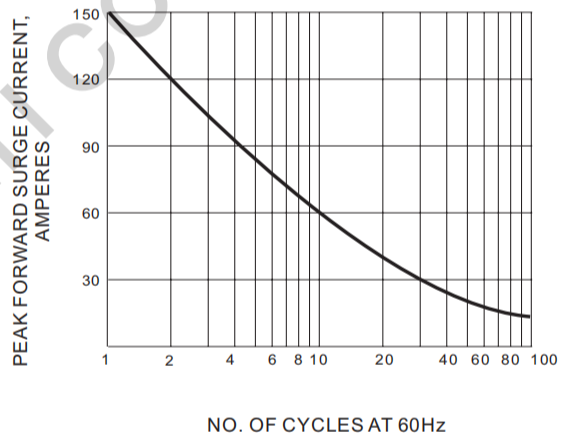


Fig.5-TYPICAL JUNCTION CAPACITANCE

