

GBJ50005~GBJ5010

BRIDGE RECTIFIERS

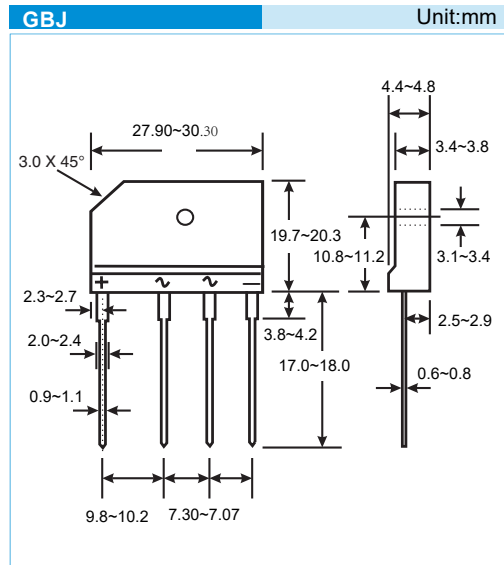
VOLTAGE 50 to 1000 Volt **CURRENT** 50 Ampere

FEATURES

- Glass passivated chip junction
- Low Forward Voltage Drop
- High Current Capability
- High reliability
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GBJ50005	GBJ5001	GBJ5002	GBJ5004	GBJ5006	GBJ5008	GBJ5010	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current (see FIG.1)	$I_{F(AV)}$	50							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	400							A
Maximum Forward Voltage at 25 A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_R	10 500							μA
Thermal Resistance (Note1)	$R_{\theta JC}$	1.5							$^\circ\text{C/W}$
I^2t Rating for fusing	I^2t	664							A^2S
Typical Junction Capacitance (Note2)	C_J	85							pF
Operating Junction Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

NOTES:

1. Thermal resistance from junction to case per element. Unit mounted on 75 x 75 x 1.6mm aluminum plate heat sink.
2. Measured at 1.0MHz and applied reverse voltage of 4.0 volt

GBJ50005~GBJ510

RATING AND CHARACTERISTIC CURVES

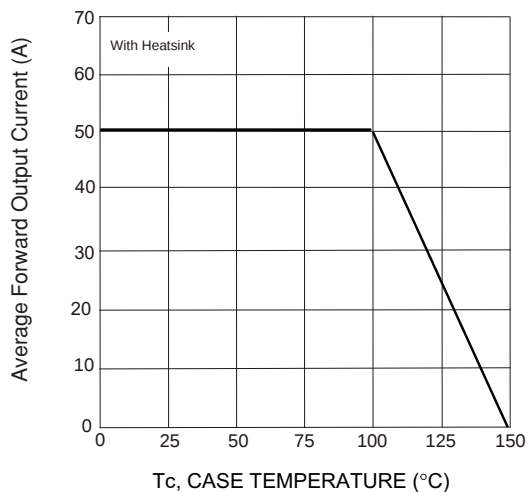


Fig. 1 Forward Current Derating Curve

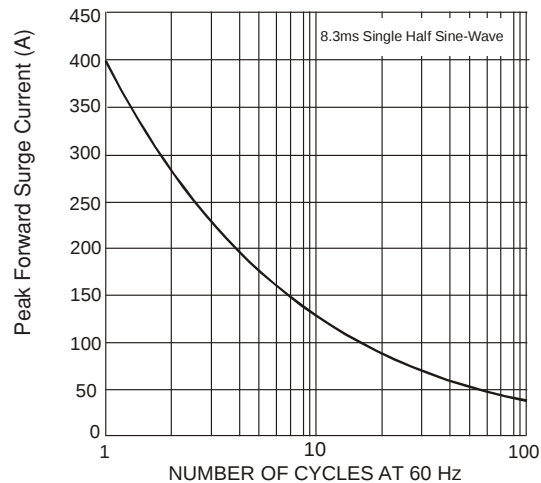


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

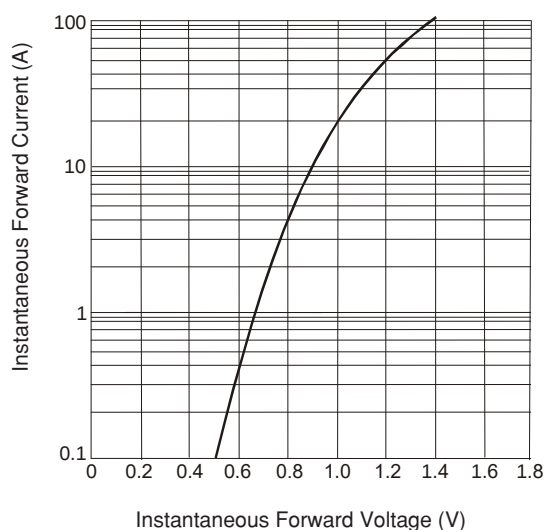


FIG.3- Typical Forward Characteristics

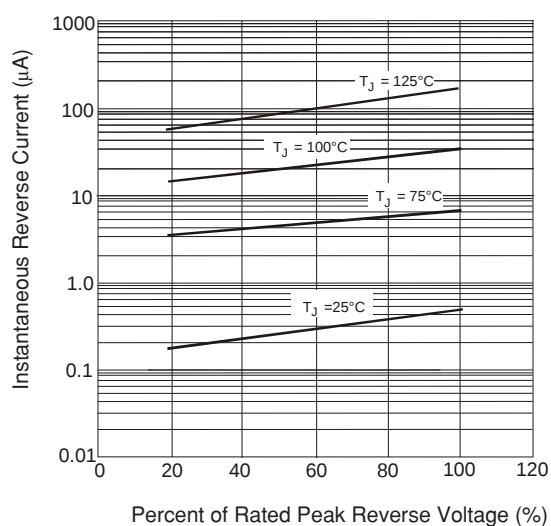


Fig. 4 – Typical Reverse Characteristics

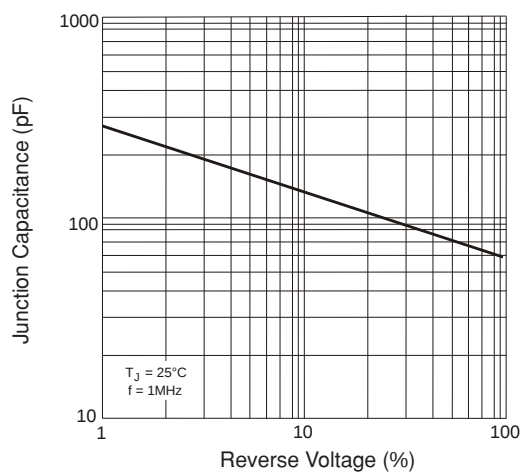


Fig. 5 - Typical Junction Capacitance

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ORDER INFORMATION

- Packing information

Part Number	Case	DELIVERY MODE	QUANTITY
GBJ50005~GBJ5010	GBJ	BULK	1500/Ctn