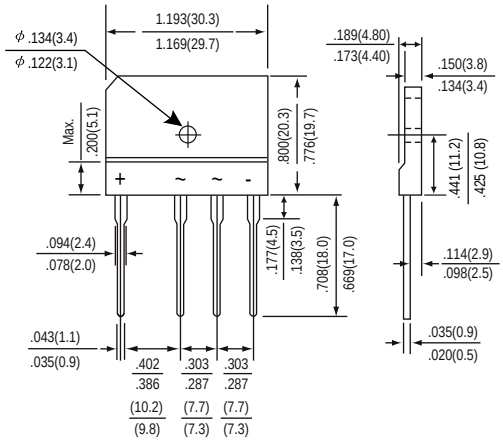
GBJ15D THRU GBJ15M

GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 200 to 1000 Volts *Forward Current - 15.0 Amperes*

GBJ



*Dimensions in inches and (millimeters)

FEATURES

* Lead free product , compliance to RoHs
* Ideal for printed circuit board
* Low forward voltage drop, high current capability
* Plastic Material-UL Recognition Flammability Classification 94V-0

MECHANICAL DATA

Case : GBJ molded plastic
Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026
Polarity : As marked on Body

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	*SYMBOLS*	***GBJ15D***	***GBJ15G***	***GBJ15J***	***GBJ15K***	***GBJ15M***	*UNITS*
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	Volts
Maximum average forward (with heatsink Note 2) rectified current at T_C=100°C	$I_{(AV)}$	15					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200					Amps
Maximum instantaneous forward voltage @ I_F=7.5 A	V_F	1.1					Volts
Maximum DC reverse current @T_C=25°C at rated DC blocking voltage @T_C=125°C	I_R	10 500					uA
Typical junction capacitance per element (NOTE 1)	C_J	60					pF
Typical thermal resistance (NOTE 2)	$R_{\theta JC}$	0.8					°C / W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150					°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
(2) Device mounted on 300 x 300 x 1.6mm Cu Plate Heatsink.

RATINGS AND CHARACTERISTIC CURVES GBJ15D THRU GBJ15M

FIG.1 - FORWARD CURRENT DERATING CURVE

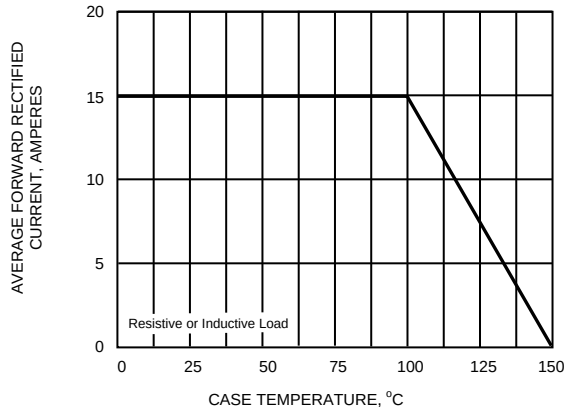


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

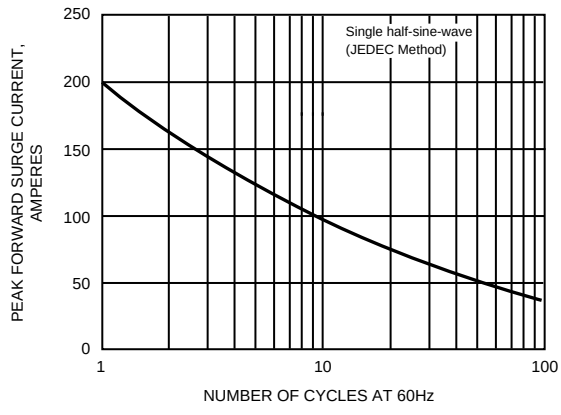


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

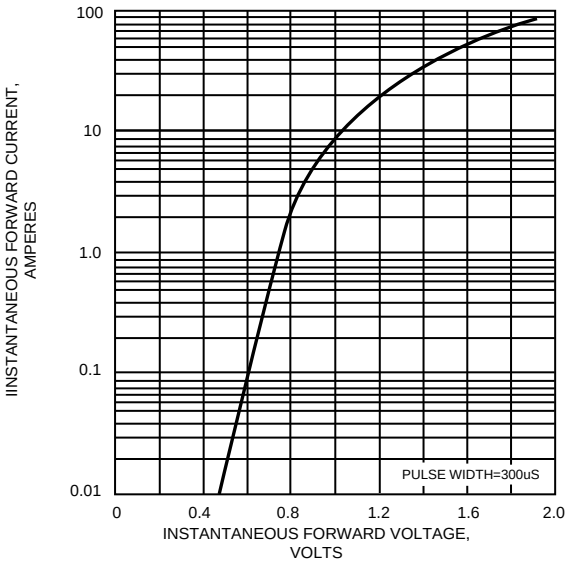


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

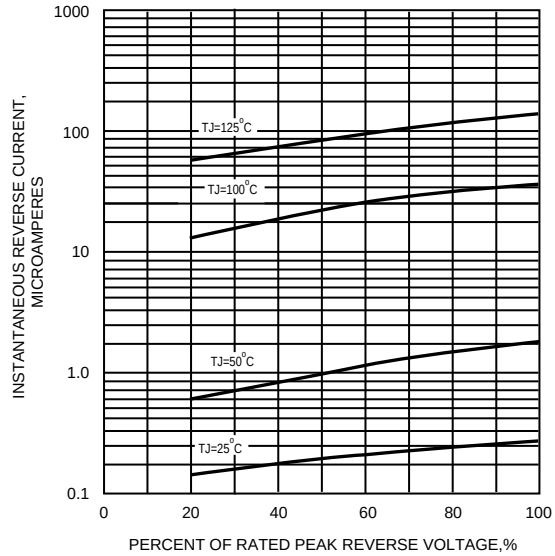


FIG.5 - TYPICAL JUNCTION CAPACITANCE