GLASS PASSIVATED CHIP SINGLE-PHASE BRIDGE RECTIFIER

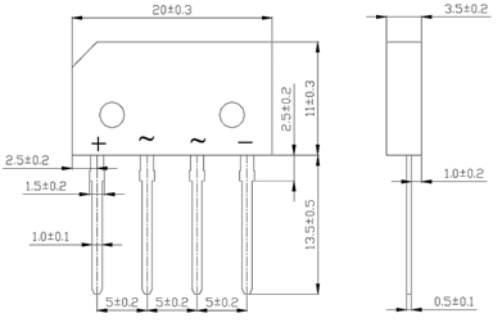
Reverse Voltage - 50 to 1000 Volts Forward Current 2.0 Amperes

Features

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Ideal for printed circuit boards
- ◆ Glass passivated chip junction
- ◆ High surge current capability

Mechanical Data

- ◆ Case: GBL(2S) Molded plastic body
- ◆ Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- ◆ High temperature soldering guaranteed: 260°C/10 seconds, 0.375 (9.5mm) lead length, 5lbs.(2.3kg) tension
- ◆ Mounting Position: Any
- ◆ Weight: 0.074 oz., 2.1 g



Package outline dimensions in millimeters

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	GBL2A	GBL2B	GBL2D	GBL2G	GBL2J	GBL2K	GBL2M	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified output current at T_A=50°C	$I_{F(AV)}$	2.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	65.0							Amps
Rating for fusing (t<8.3ms)	I^2t	17							A^2sec
Maximum instantaneous forward voltage drop per leg at 1.0A	V_F	1.0							Volt
Maximum DC reverse current at rated DC blocking voltage per leg T_A=25°C / T_A=100°C	I_R	5.0 250.0							uA
Typical junction capacitance per leg at 4.0V, 1MHz	C_J	25							pF
Typical thermal resistance per leg (Note 1)	$R_{\theta JA}$ (2) $R_{\theta JC}$ (1)	32 13							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							°C

Notes 1. Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B with 0.47" x 0.47" (12mm x 12mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES

(T_A = 25°C unless otherwise noted)

FIG.1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

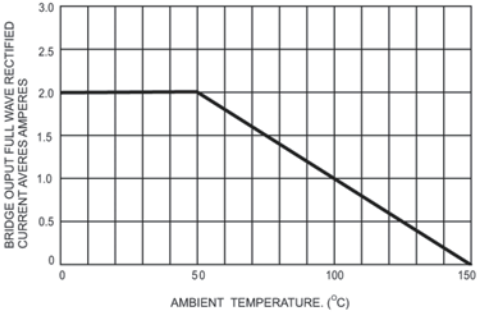


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

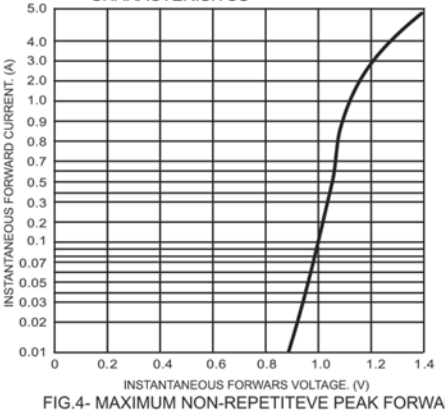


FIG.3- TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

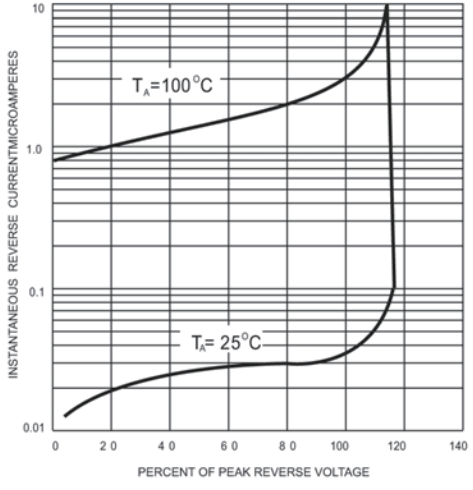


FIG.4- MAXIMUM NON-REPETITEVE PEAK FORWARD SURGE CURRENT