GBJ10005 THRU GBJ1010

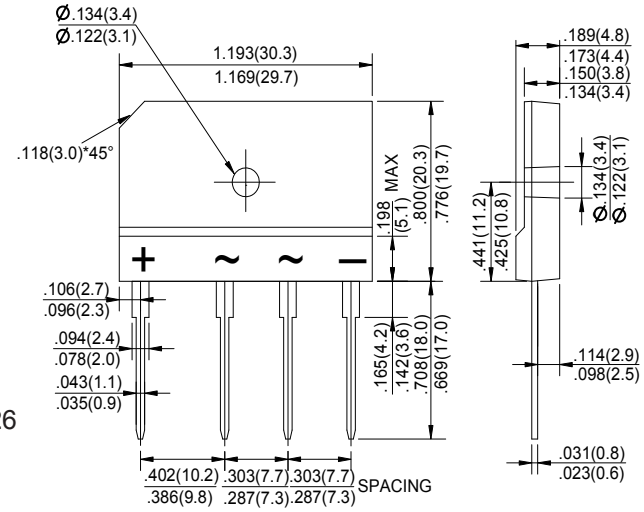
Reverse Voltage - 50 to 1000 Volts Forward Current - 10.0 Amperes

SILICON BRIDGE RECTIFIERS

Features

- Glass Passivated Chip Junction
- Reting to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic
- technique Plastic material has U/L lammability classification 94V-0
- Low forward voltage drop,high current capability

GBJ RoHS COMPLIANT



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC GBJ Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Mounting Torque: 5in-lbs

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwisespecified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter / Marking Code	SYMBOLS	MDD GBJ10005	MDD GBJ1001	MDD GBJ1002	MDD GBJ1004	MDD GBJ1006	MDD GBJ1008	MDD GBJ1010	UNITS
Maximum repetitive 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(with heatsink NOTE 2) Rectified current @T_C=100°C(without heatsink)	$I_{(AV)}$	10.0 3.4							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	220							A
Rating for Fusing(t<8.3ms)	I^2t	200.86							A^2s
Maximum forward voltage at 5.0A DC	V_F	1.0							V
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=125°C	I_R	10 0.5							μA mA
Typical Junction Capacitance (Note 1)	C_J	55							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	1.8							°C/W
Operating junction temperature range	T_J	-55 to +150							° C
storage temperature range	T_{STG}	-55 to +150							° C

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Device mounted on 75mm*75mm*1.6mm Cu plate heatsink.
3.The typical data above is for reference only.

Ratings And Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

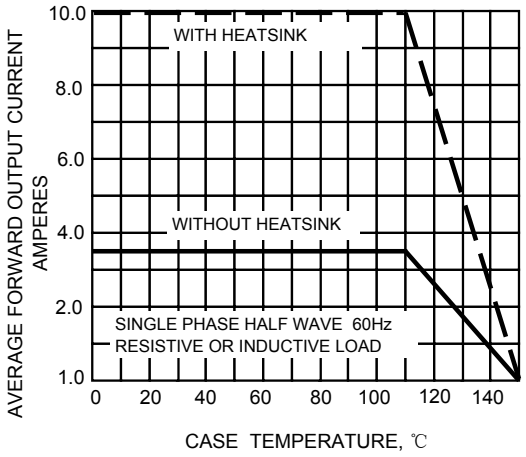


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

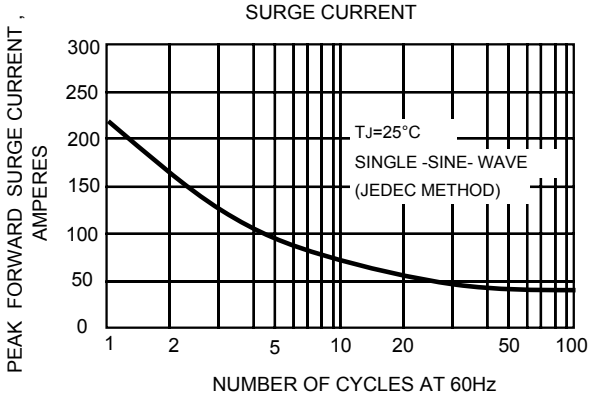


FIG.3-TYPICAL JUNCTION CAPACITANCE

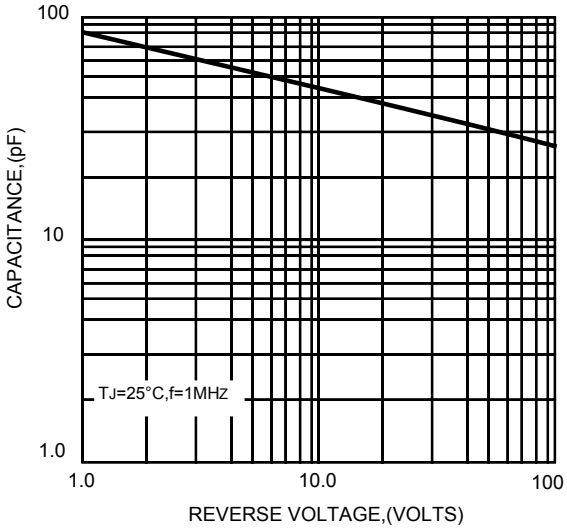


FIG.4-TYPICAL FORWARD CHARACTERISTICS

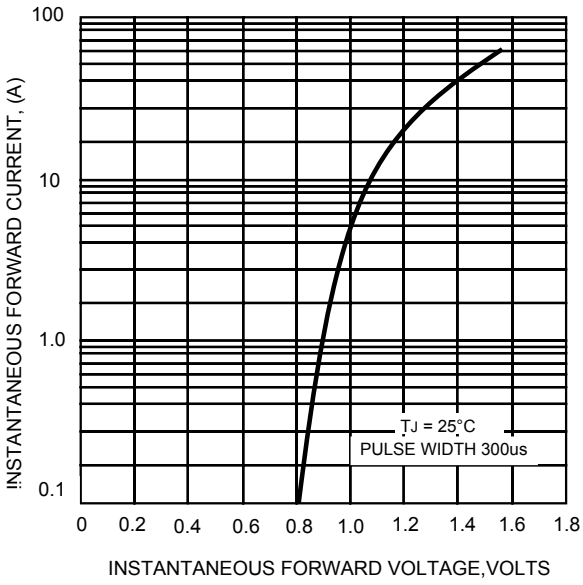
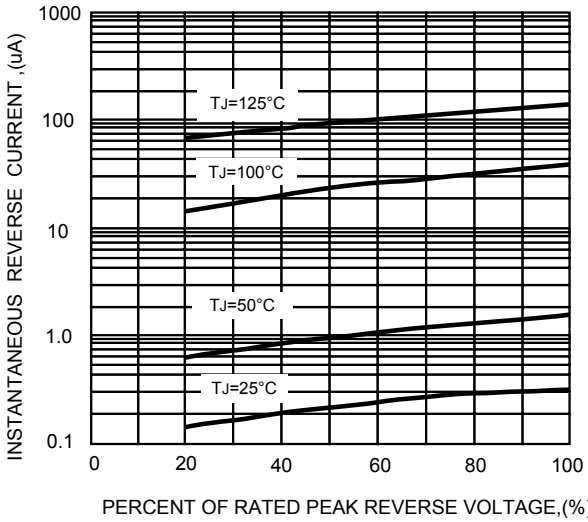


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.

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