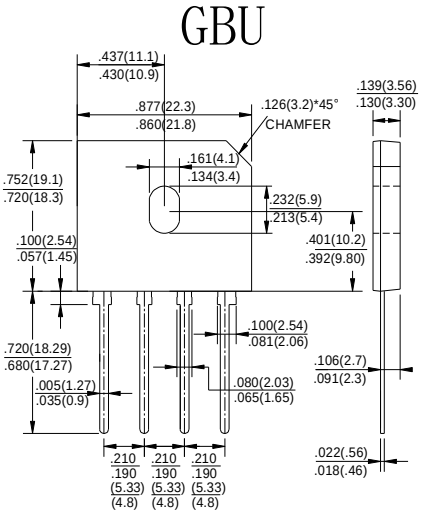
GBU10005 THRU GBU1010

SILICON BRIDGE RECTIFIERS

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



Dimensions in inches and (millimeters)

FEATURES

- Ideal for printed circuit boards
- Reliable low cost construction technique results in inexpensive product
- High temperature soldering guaranteed: 260℃/10 seconds/0.375" (9.5mm) lead length at 5 lbs.,(2.3kg) tension

MECHANICAL DATA

Case: Molded plastic
Lead: Solder plated
Polarity:As marked

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	GBU10005	GBU1001	GBU1002	GBU1004	GBU1006	GBU1008	GBU1010	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 (with heatsink Note 2) Rectified Current @ T_C=100℃ (without heatsink)	$I_{(AV)}$	10.0 3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	220.0							Amps
Maximum instantaneous forward voltage at 5.0A	V_F	1.1							Volts
Maximum DC reverse current at T_A=25℃ rated DC blocking voltage per leg T_A=125℃	I_R	10 500							μA
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.2							°C/W
Typical Junction Capacitance Per Element (Note1)	C_J	70							pF
I^2t Rating for Fusing (t<8.3ms)	I^2t	200							A^2s
Operating 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 100mm*100mm*1.6mm Cu plate heatsink.

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RATINGS AND CHARACTERISTIC CURVES GBU10005 THRU GBU1010

FIG.1-MAXIMUM FORWARD SURGE CURRENT

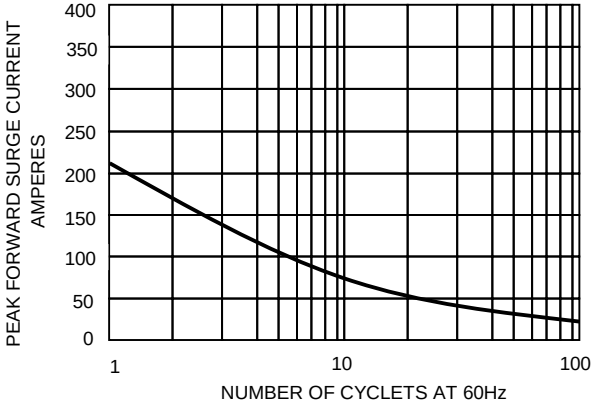


FIG.2- DERATING CURVE
OUTPUT RECTIFIED CURRENT

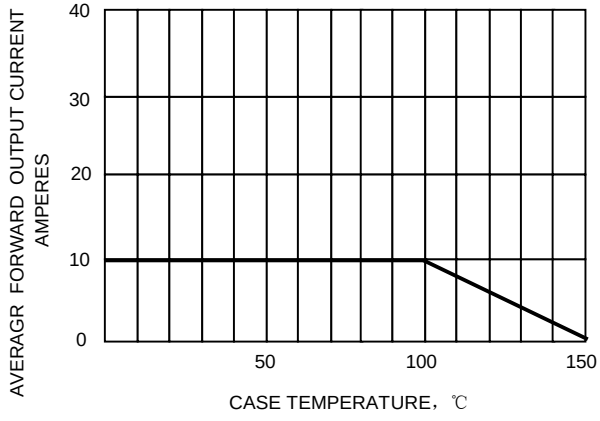


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

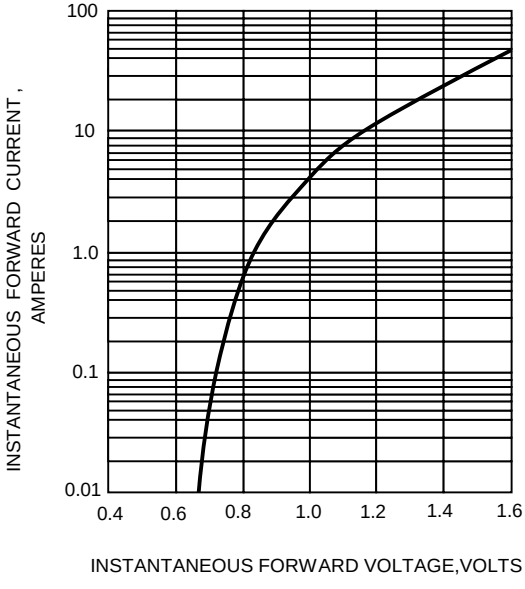
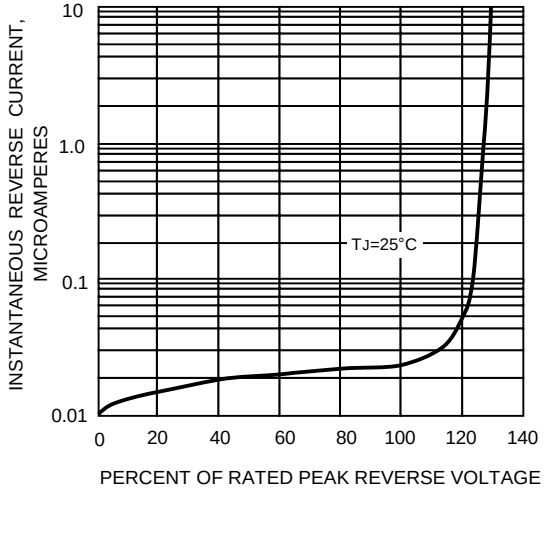


FIG.4-TYPICAL REVERSE
CHARACTERISTICS



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