SAMYANG ELECTRONICS

GBU10005---GBU1010

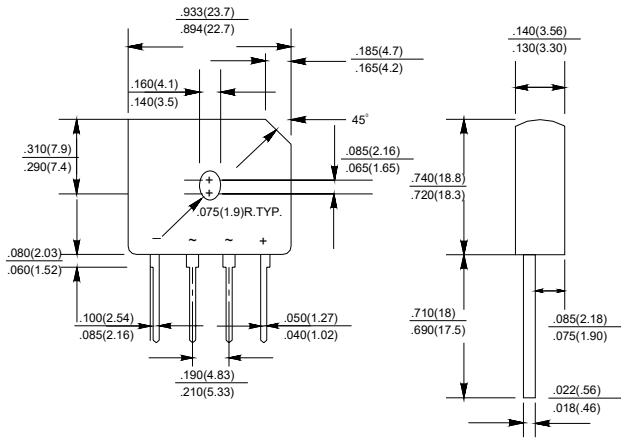
GLASS PASSIVATED BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 10.0 A

FEATURES

- ◇ Ideal for printed circuit board
- ◇ Reliable low cost construction utilizing molded plastic technique
- ◇ Plastic materrial has U/L flammability classification 94V-O
- ◇ Mounting position: Any
- ◇ Glass passivated junctions

GBU



inch(mm)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

		GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	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 forw ard Tc=100℃ output current	$I_{F(AV)}$	10.0							A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load	I_{FSM}	240.0							A
Maximum instantaneous forw ard voltage @ 5.0 A	V_F	1.1							V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=125℃	I_R	5.0 500.0							μA
Typical junction capacitance per leg (note 3)	C_J	211				94			pF
Typical thermal resistance per leg (note 2) (note 1)	R_{JA} R_{JC}	21.0 2.2							℃/W
Operating junction temperature range	T_J	- 55 ---- + 150							℃
Storage temperature range	T_{STG}	- 55 ---- + 150							℃

NOTE: 1. Unit case mounted on 3.2x3.2x0.12" thick (6.2x8.2x0.3cm) Al. Plate.

2. Units mounted in free air, no heat sink on P.C.B., 0.5x0.5"(12x12mm) copper pads, 0.375"(9.5mm) lead length.

3. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.

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FIG.1 – DERATING CURVE FOR OUTPUT RRECTIFIED CURRENT

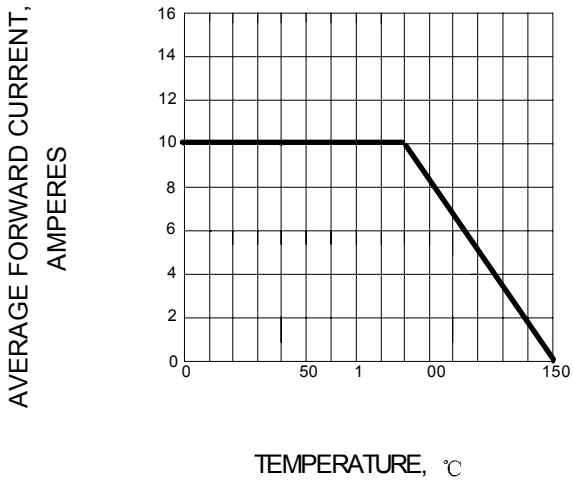


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

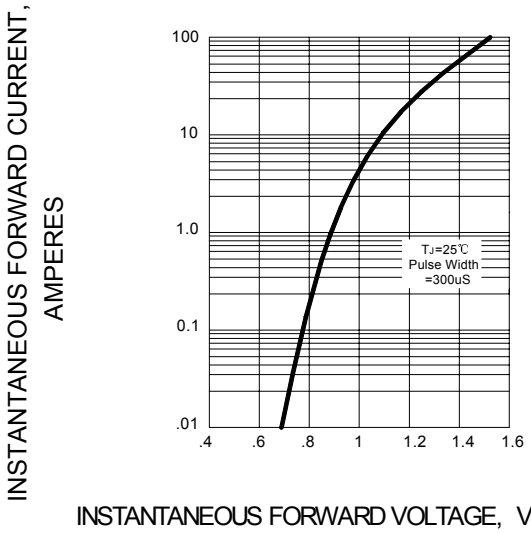


FIG.3 – MAXIMUM NON-REPETITIVE PEAK FORWARD DURGE CURRENT

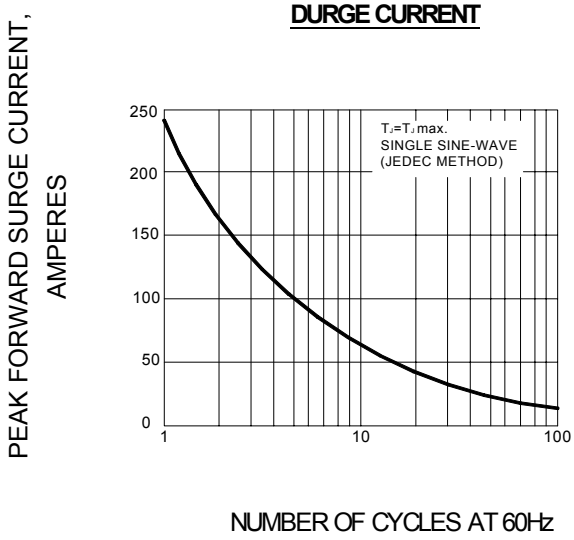


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

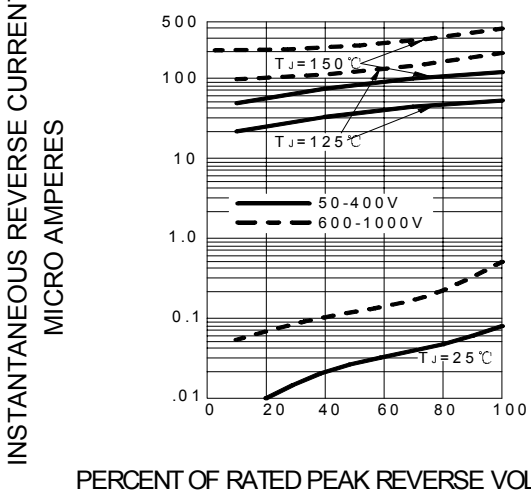


FIG.5 – TYPICAL JUNCTION CAPACITANCE PER LEG

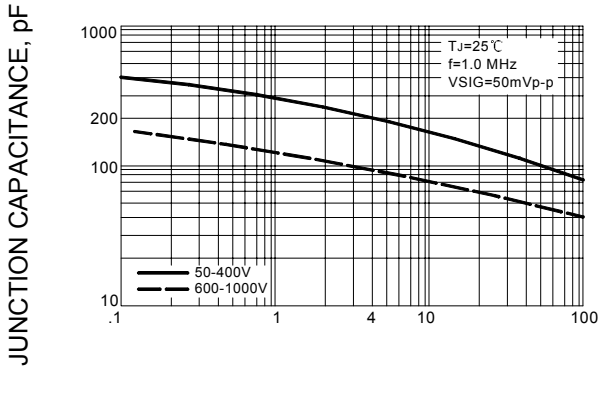


FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE

