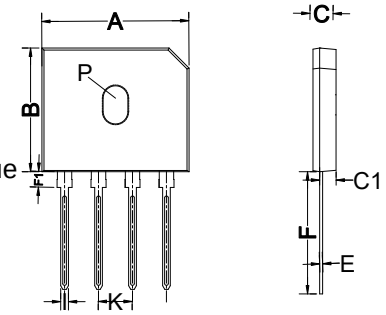
GBU15005-GBU1510

Silicon Bridge Rectifiers

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 chip junctions



GBU		
Dim	Min	Max
A	21.60	22.40
B	18.20	19.80
C	3.20	3.80
C1	1.80	2.80
E	0.40	0.60
F	17.00min	
F1	1.70	2.40
I	0.95	1.25
K	4.70	5.30
P	R1.9typical	
All Dimensions in mm.		

Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	GBU15005	GBU1501	GBU1502	GBU1504	GBU1506	GBU1508	GBU1510	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 forward Output current @T_C=100℃	$I_{F(AV)}$	15.0							A
Peak forward surge current 8.3ms single half-sine-wav superimposed on rated load	I_{FSM}	240							A
I²t Rating for fusing @Tj=25℃	I²t	239							A²S

Thermal Characteristics

Characteristic	Symbol	GBU15005	GBU1501	GBU1502	GBU1504	GBU1506	GBU1508	GBU1510	UNITS
Typical junction capacitance per leg (note 3)	C_J	211				94			p F
Typical thermal resistance per leg (note 2) (note 1)	$R_{\theta JA}$ $R_{\theta JC}$	21 2.2							℃/W
Operating junction temperature range	T_J	- 55 ---- + 150							℃
Storage temperature range	T_{STG}	- 55 ---- + 150							℃

Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	GBU15005	GBU1501	GBU1502	GBU1504	GBU1506	GBU1508	GBU1510	UNITS
Maximum instantaneous forward voltage @7.5A @15A	V_F	1.0 1.1							V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=125℃	I_R	5.0 500							μ A

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

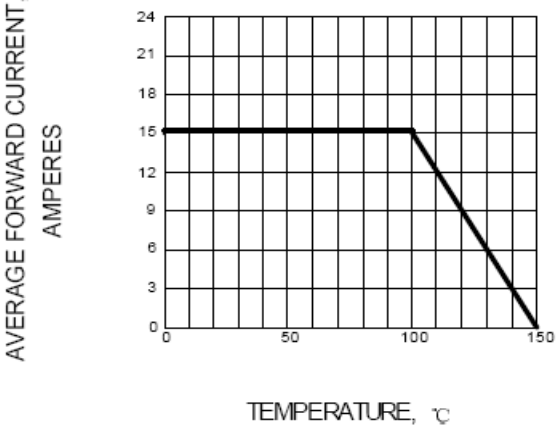


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

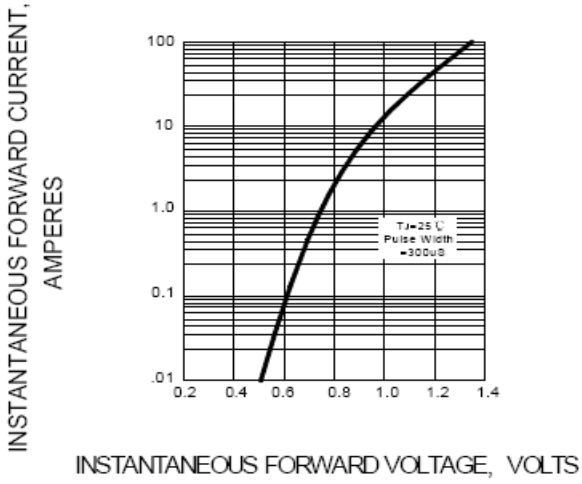


FIG.3 – MAXIMUM NON-REPETITIVE PEAK FORWARD DURGE CURRENT

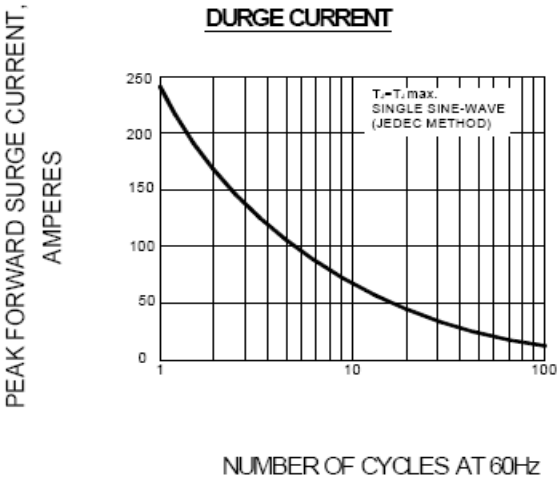


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

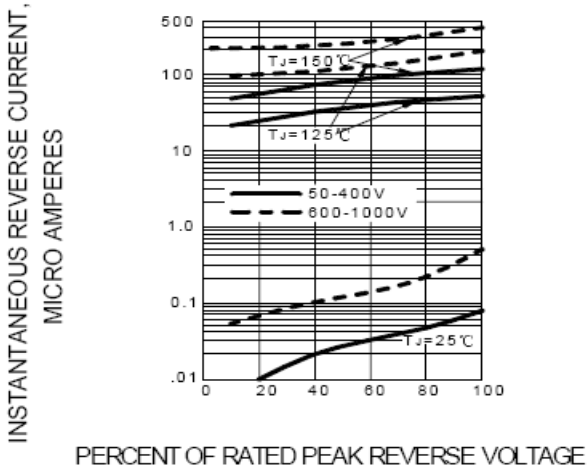


FIG.5 – TYPICAL JUNCTION CAPACITANCE PER LEG

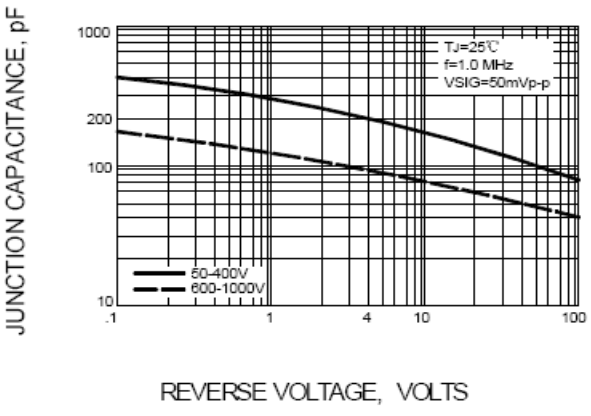
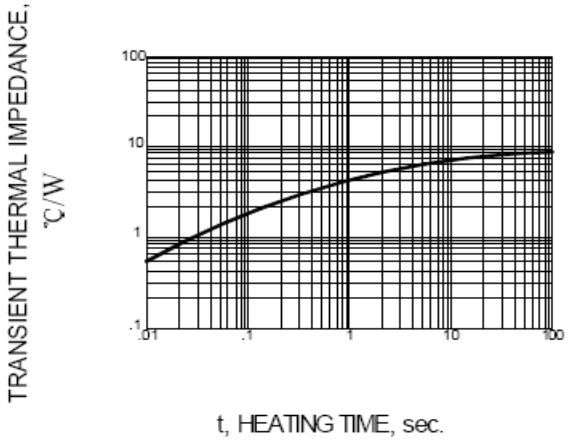


FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE



Device	Package	Shipping
GBU15005--GBU1510	GBU	500 Units/Box