

Silicon Bridge Rectifiers

GBU25005--GBU2510

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 350 Amperes peak
- High efficiency
- Electrically isolated metal case for maximum heat dissipation
- Mounting: thru hole for # 8 screw Mounting
- Glass passivated chip junctions



Lead-free

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

Characteristic	Symbol	GBU25005	GBU2501	GBU2502	GBU2504	GBU2506	GBU2508	GBU2510	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 _A =25°C	I _{F(AV)}	25							A
Peak forward surge current 8.3ms single half-sine-wav superimposed on rated load	I _{FSM}	350							A

Thermal Characteristics

Characteristic	Symbol	GBU25005	GBU2501	GBU2502	GBU2504	GBU2506	GBU2508	GBU2510	UNITS
Operating junction temperature range	T _J	- 55-----+ 150							°C
Storage temperature range	T _{STG}	- 55-----+ 150							°C

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

Characteristic	Symbol	GBU25005	GBU2501	GBU2502	GBU2504	GBU2506	GBU2508	GBU2510	UNITS
Maximum instantaneous forward voltage @12.5A	V _F	1.1							V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	5.0 500							μ A



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PACKAGE OUTLINE DIMENSIONS

GBU		
Dim	Min	Max
A	22.00	22.40
B	18.40	18.80
C	3.40	3.95
C1	2.50	3.00
E	0.40	0.60
F	17.00min	
F1	1.70	2.30
I1	2.30	2.60
I2	0.95	1.25
K	4.70	5.30
P	R1.9typical	
All Dimensions in mm		

PACKAGE INFORMATION

Device	Package	Shipping
GBU25005--GBU2510	GBU	500 Units/Box



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FIG.1 – DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

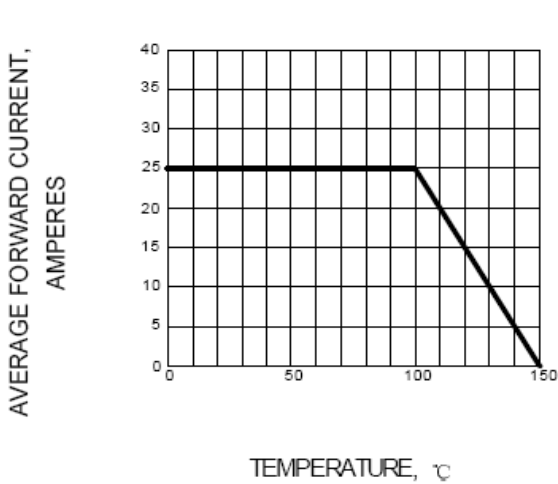


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

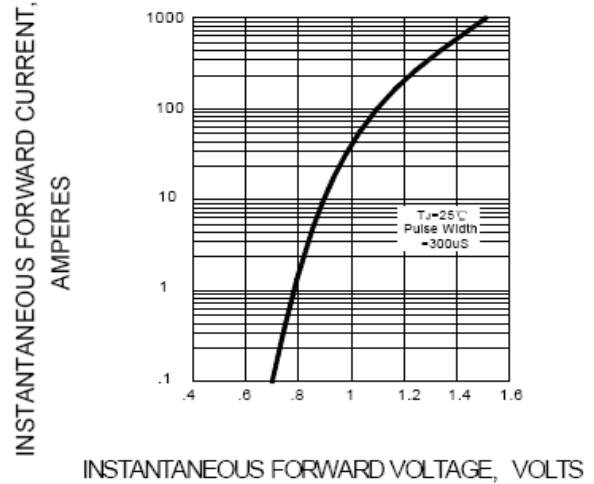


FIG.3 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

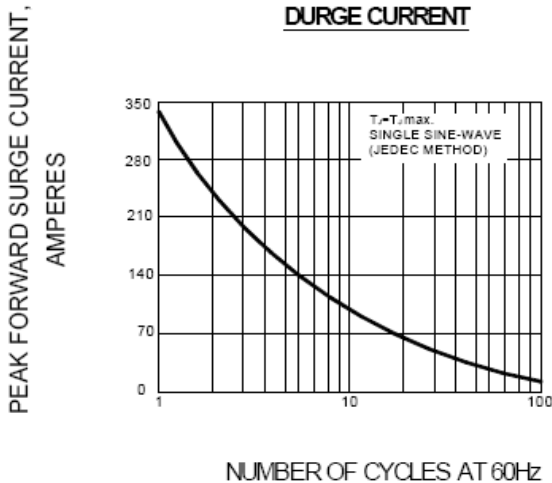


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

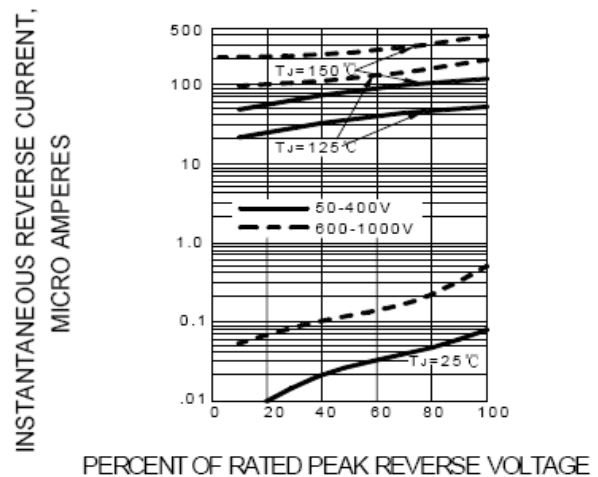


FIG.5 -- TYPICAL JUNCTION CAPACITANCE PER LEG

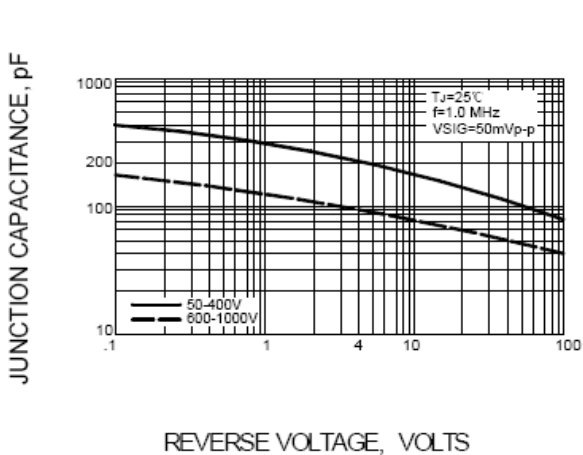


FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE

