Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Silicon Bridge Rectifier

V_{RRM} = 50 V - 1000 V

I_F =4 A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Types up to 1000 V V_{RRM}
- Ideal for printed circuit board
- High surge overload rating
- High temperature soldering guaranteed: 260^{0}C/ 10 seconds, 0.375(9.5mm) lead length
- Glass passivated chip junction
- High case dielectric strength 1500 V_{RMS}

GBU Package

Mechanical Data

Case: Molded plastic body over passivated junctions

Mounting position: Any

Terminals: Plated leads, solderable per MIL-STD-750 Method 2026 guaranteed

Maximum ratings, at T_j = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	GBU4A	GBU4B	GBU4D	GBU4G	Unit
Repetitive peak reverse voltage	V_{RRM}		50	100	200	400	V
RMS reverse voltage	V_{RMS}		35	70	140	280	V
DC blocking voltage	V_{DC}		50	100	200	400	V
Continuous forward current	I_F	$T_C \leq 100$ °C	4	4	4	4	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	T_C = 25 °C, t_p = 8.3 ms	150	150	150	150	A
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C

Electrical characteristics, at Tj = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	GBU4A	GBU4B	GBU4D	GBU4G	Unit
Diode forward voltage	V_F	I_F = 4 A, T_j = 25 °C	1.1	1.1	1.1	1.1	V
Reverse current	I_R	V_R = 50 V, T_j = 25 °C	5	5	5	5	µA
		V_R = 50 V, T_j = 125 °C	500	500	500	500	
Thermal characteristics							
Thermal resistance, junction - case	R_{thJA}		22.0	22.0	22.0	22.0	°C/W
	R_{thJL}		4.2	4.2	4.2	4.2	

FIG.1-DERATIVE CURVE FOR OUTPUT RECTIFIER CURRENT

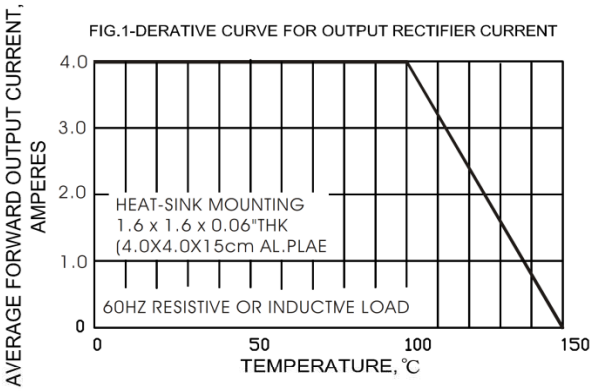

FIG. 2 - MAXIMUN NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

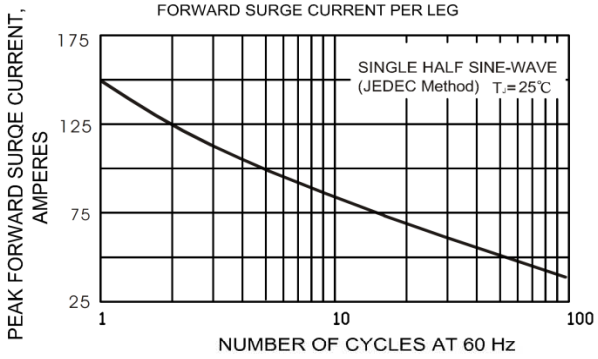

FIG.3-TYPICAL FORWARD CHARACTERISTICS PER LEG

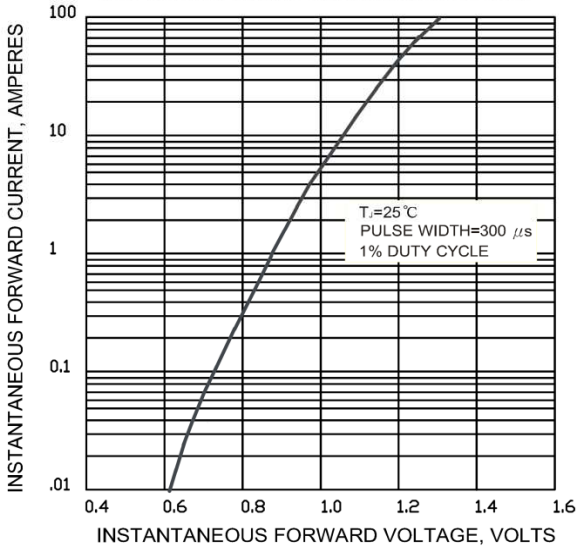

FIG.4-TYPICAL REVERSE CHARACTERISTICS PER LEG

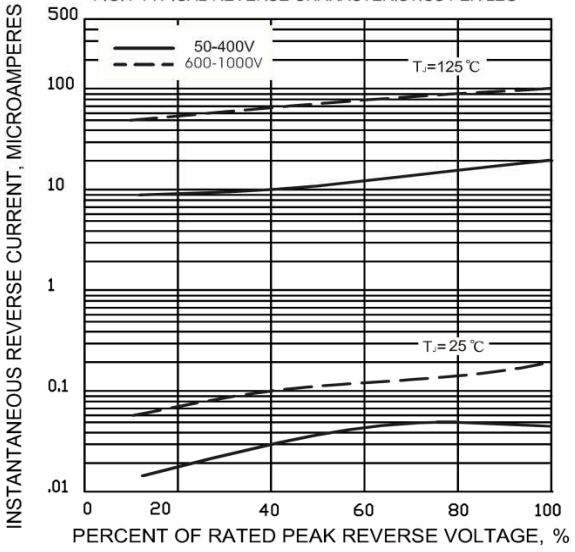

FIG.5-TYPICAL JUNTION CAPACITANCE PER LEG

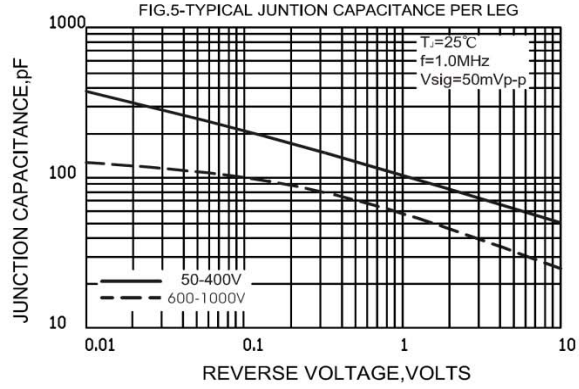

FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE