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

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Silicon Bridge Rectifier

V_{RRM} = 50 V - 1000 V
I_F =4 A

Features

- Types up to 1000 V V_{RRM}
- Ideal for printed circuit board
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique
- Silver plated copper leads

KBL Package

Mechanical Data

Case: Molded plastic
Weight: 0.167 oz, 5 g
Mounting position: Any
Terminals: Plated leads, solderable per MIL-STD-202F, Method 208
Polarity: Marked on body

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

Parameter	Symbol	Conditions	KBL401G	KBL402G	KBL403G	KBL404G	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	$T_C \leq 50$ °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	120	120	120	120	A
Operating temperature	T_j		-50 to 150	-50 to 150	-50 to 150	-50 to 150	°C
Storage temperature	T_{stg}		-50 to 150	-50 to 150	-50 to 150	-50 to 150	°C

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

Parameter	Symbol	Conditions	KBL401G	KBL402G	KBL403G	KBL404G	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	100	100	100	100	

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

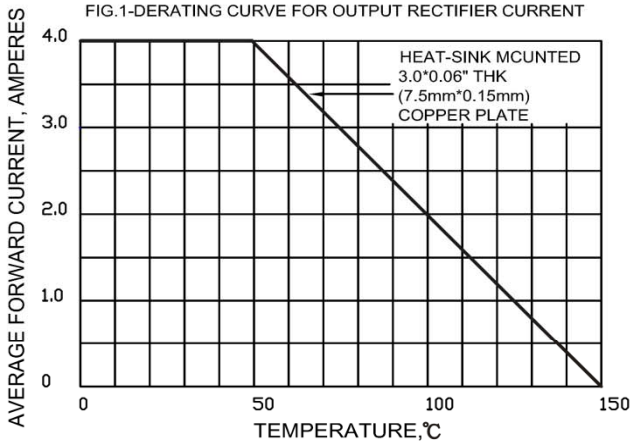

FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

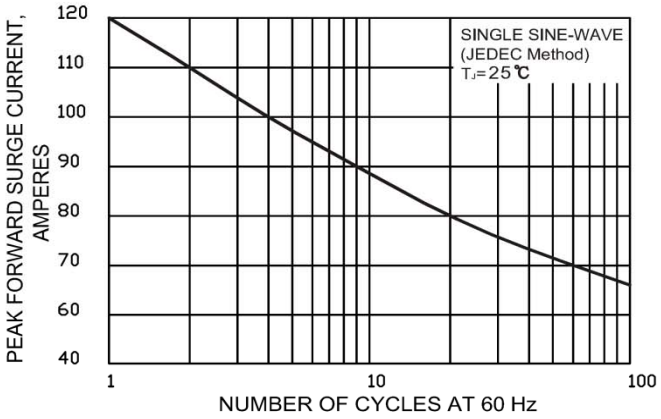

FIG.3-TYPICAL REVERSE LEAKAGE CHARACTERISTICS
PER BRIDGE ELEMENT

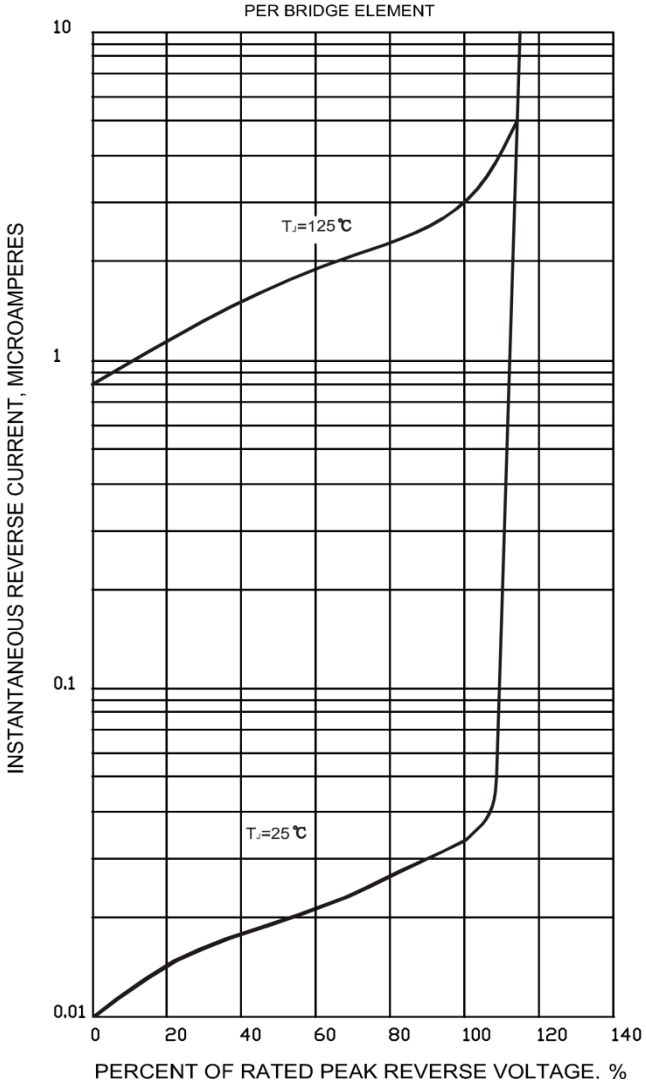

FIG.4-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

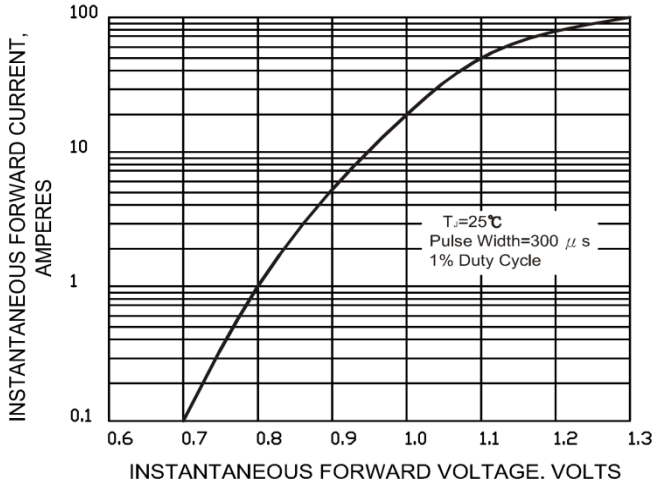

FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT