Technical Data
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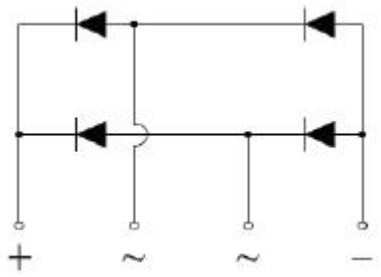
KBJL606 THRU KBJL610
Glass Passivated Single-Phase Bridge Rectifiers

KBJL

Features

- Thin Single in-line low profile package ideal for compact required circuit
- Glass passivated junction
- High surge current capability
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: KBJL, Molding compound, UL flammability classification rating 94V-0
- Terminals: Matte tin plated leads, solderable per JESD22-B102 Meet JESD 201 class 2 whisker test
- Polarity: as marked on case
- Mounting torque: 0.5N.m is recommended
- Weight: 2.6 g (approximately)

Maximum Ratings @T_A=25°C unless otherwise specified

Type Number	Symbol	KBJL606	KBJL608	KBJL610	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	420	560	700	V
Maximum average forward rectified current	$I_{F(AV)}$	6			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave	I_{FSM}	150			A
Non-Repetitive Peak Forward Surge Current 1ms Single half sine-wave	I_{FSM}	280			A
Rating of fusing (t<8.3ms)	I^2t	93			A^2s

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Electrical Characteristics@T_A=25˚C unless otherwise specified

Type Number	Symbol	KBJL606	KBJL608	KBJL610	Units
Forward Voltage @I_F =3A	V_F	1.05			V
Peak Reverse Current @T_A = 25˚C At Rated DC Blocking Voltage @T_A = 125˚C	I_{RM}	5.0 150			μA

* Pulse width < 300 μs, duty cycle < 2%

Thermal-Mechanical Specifications:

Type Number	Symbol	KBJL606	KBJL608	KBJL610	Units
Typical Thermal Resistance (Notes)	$R_{\theta JC}$ $R_{\theta JA}$	2 7			˚C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150			˚C

Note: 1. Mount on Heatsink size of 4" x 6" x 0.25" Al-Plate

Ratings and Characteristics Curves

FIG.1 FORWARD CURRENT DERATING CURVE

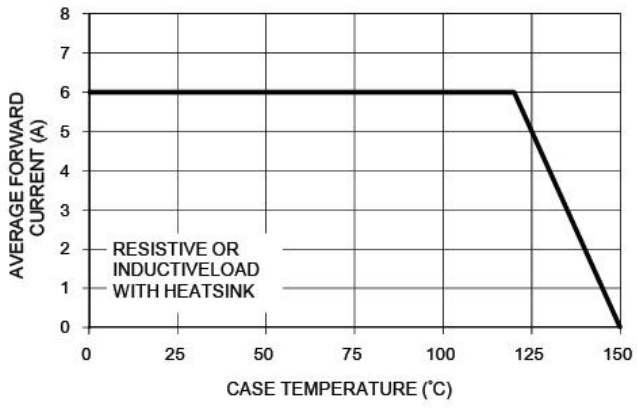

FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

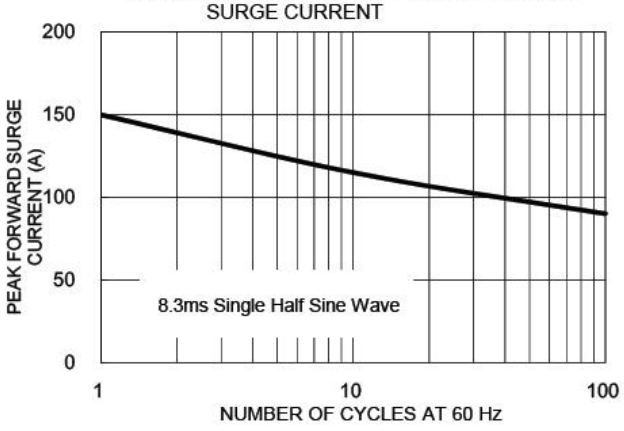

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FIG. 3 TYPICAL FORWARD CHARACTERISTICS

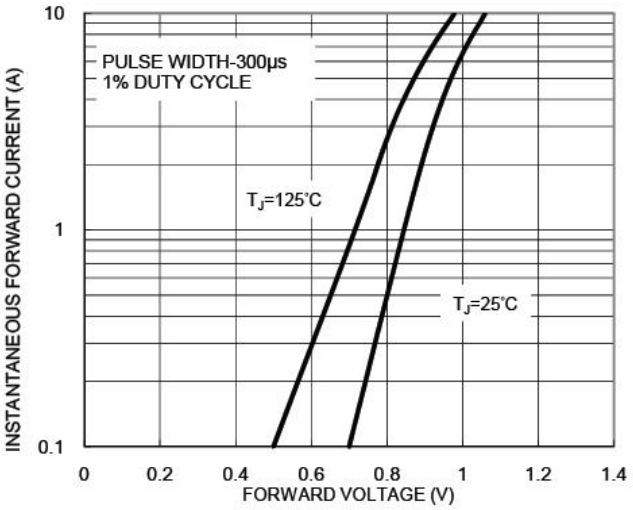


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

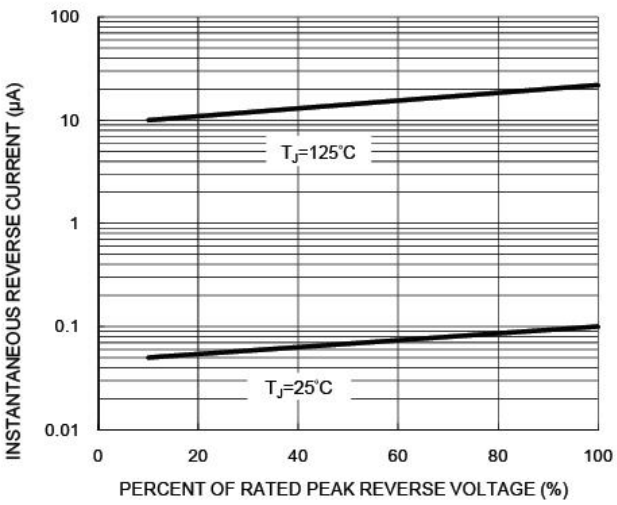
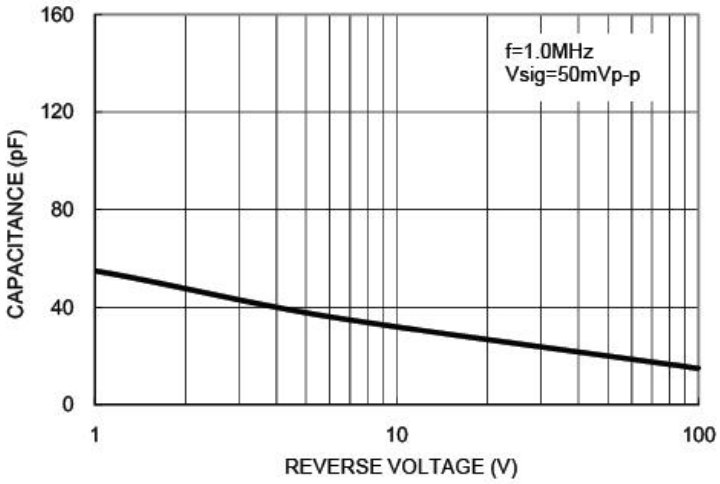


FIG. 5 TYPICAL JUNCTION CAPACITANCE



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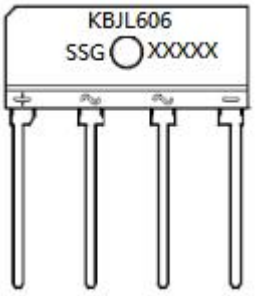
Ordering Information

Device	Package	Plating	Shipping
KBJL606 THRU KBJL610	KBJL	Pure Sn	20pcs / tube

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

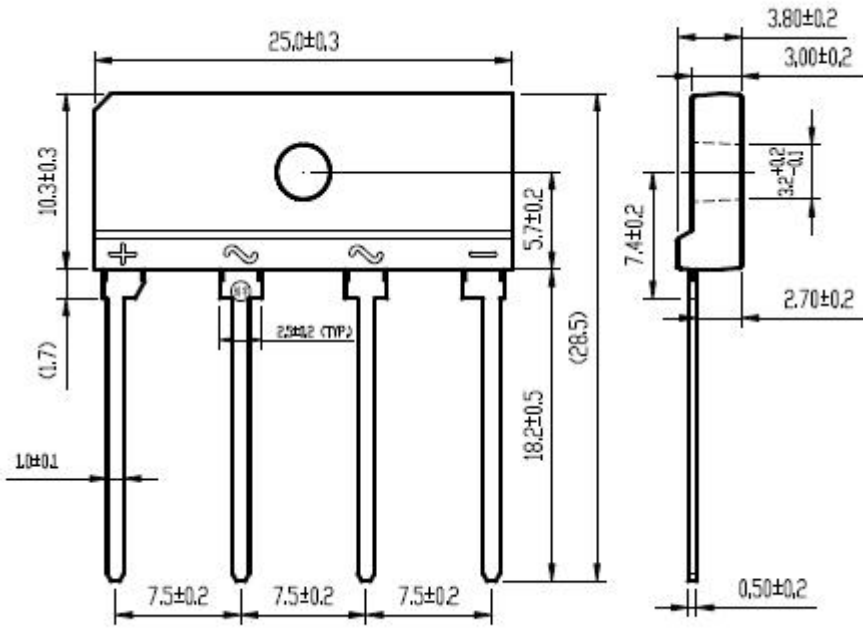


Where XXXXX is YYWWL

KBJL606 = Type Number
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Mechanical Dimensions KBJL



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