Technical Data
Data Sheet N2307, Rev. -

Automotive Qualified

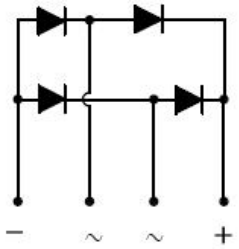
KBJ1010G-A
GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

KBJ

Features

- Glass passivated chip junction KBJ
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability
- "-A" is an AEC-Q101 qualified device
- 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: Molded plastic, KBJ
- Epoxy: UL 94V-O rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- Mounting position: Any
- Weight: 0.16ounce, 4.6gram

Maximum Ratings: @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	KBJ1010G-A	Units
Marking Code		**KBJ1010G**	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	1000	V
RMS Reverse Voltage	V_{RMS}	700	V
Average forward rectified output current @T_C=80°C	I_O	10	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150	A
I^2t Rating for 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	KBJ1010G-A	Units
Forward Voltage (per element)* @I_F =5A	V_F	1.1	V
Peak Reverse Current* @T_A = 25°C At Rated DC Blocking Voltage* @T_A = 125°C	I_{RM}	10 500	μA

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

Thermal-Mechanical Specifications:@T_A=25°C unless otherwise specified

Type Number	Symbol	KBJ1010G-A	Units
Typical Thermal Resistance(Note 1)	$R_{\theta JC}$	2.3	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

Note: 1. Between junction and case, with heatsink

Ratings and Characteristics Curves

FIG1:Io-Tc Curve

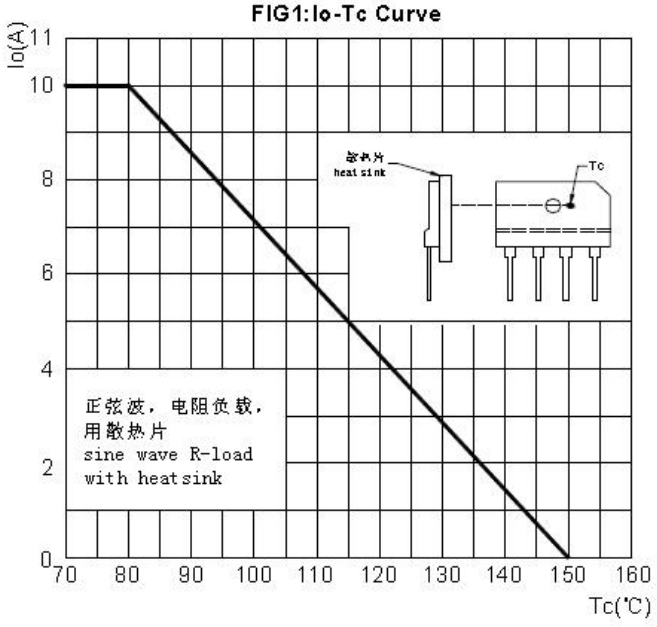

FIG2:Surge Forward Current Capadility

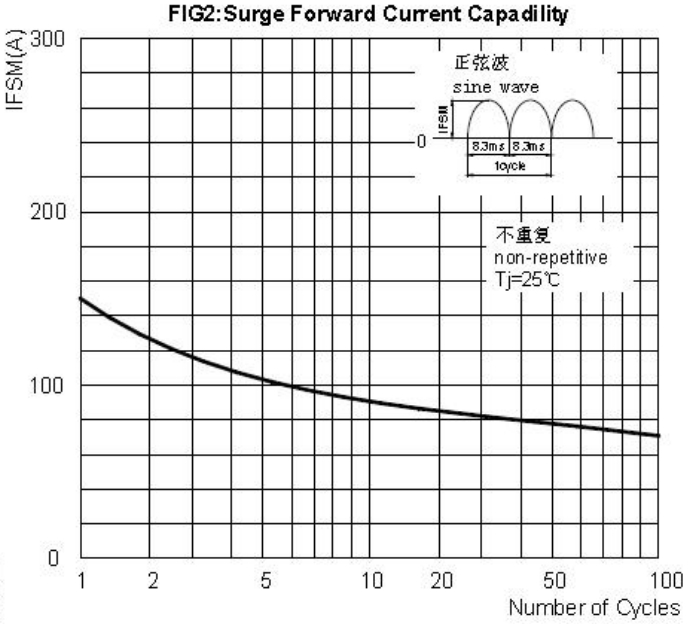

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FIG3: Forward Voltage

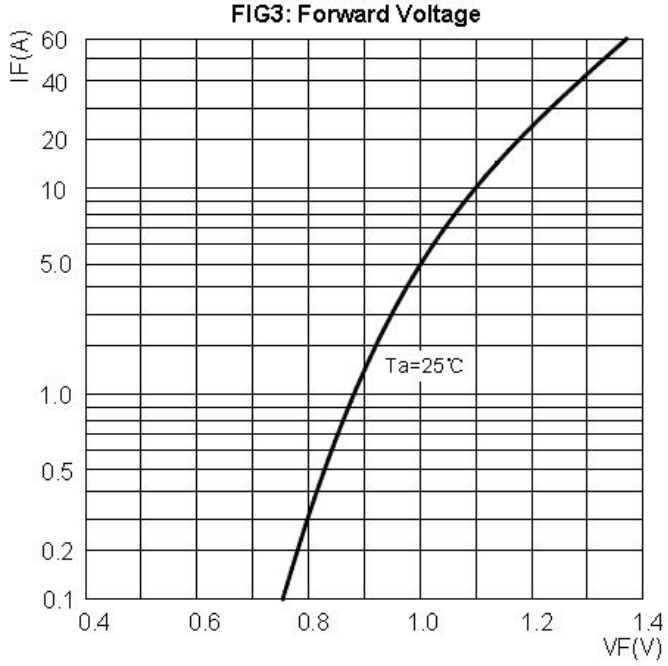
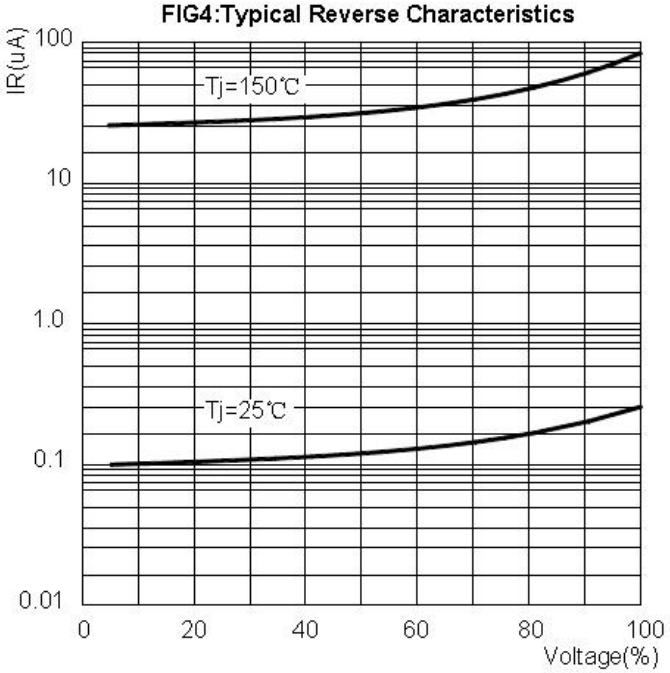


FIG4:Typical Reverse Characteristics

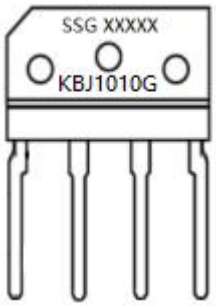


Ordering Information

Device	Package	Plating	Shipping
KBJ1010G-A	KBJ (Pb-Free)	Pure Sn	250pcs / box

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

Marking Diagram

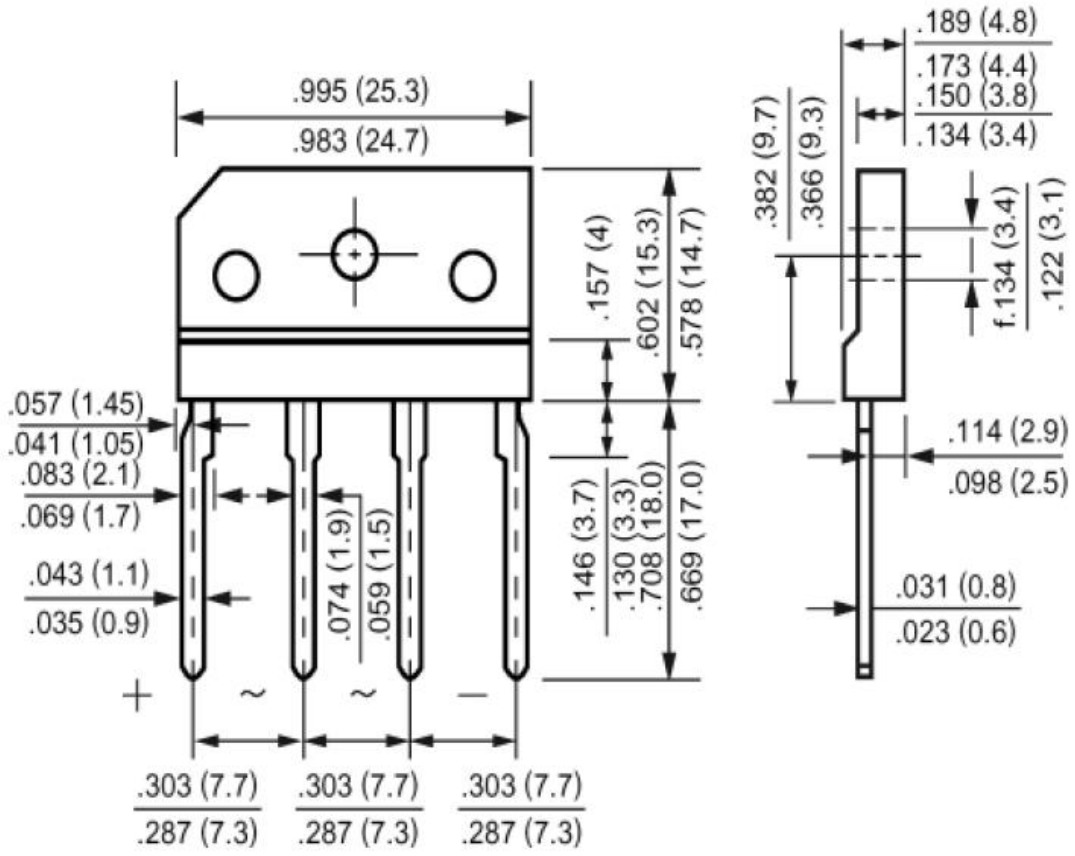


Where XXXXX is YYWWL

SSG	= SSG
YY	= Year
WW	= Week
L	= Lot Number
KBJ1010G	= Marking codde

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

Mechanical Dimensions KBJ (Inches/Millimeters)



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