

**KBJ4005G THRU KBJ410G
GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER**

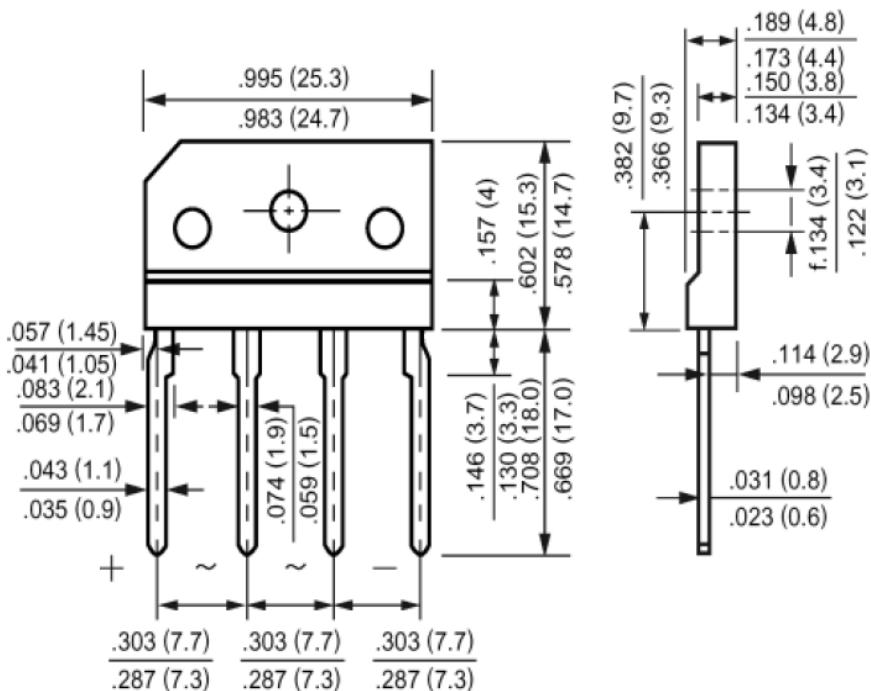
Features:

- 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

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

Mechanical Dimensions: In Inches/mm



KBJ

MARKING, MOLDING RESIN

Marking for Type Number, 1st row SSG YYWWL, 2nd row Type Number
Where YY is the manufacture year
WW is the manufacture week code
L is the wafer's Lot Number



KBJ4005G THRU KBJ410G

Technical Data
Data Sheet N1818, Rev. -

Green Products

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings:

Type Number	Symbol	KBJ 4005G	KBJ 401G	KBJ 402G	KBJ 404G	KBJ 406G	KBJ 408G	KBJ 410G	Unit
Maximum Recurrent Peak Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum Average Forward Rectified Current @ $T_C = 115^\circ C$	$I_{(AV)}$	4.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120							A

Electrical Characteristics:

Type Number	Symbol	KBJ 4005G	KBJ 401G	KBJ 402G	KBJ 404G	KBJ 406G	KBJ 408G	KBJ 410G	Unit
Maximum Forward Voltage @ $I_F = 2.0A$	V_{FM}	1.0							V
Peak Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 125^\circ C$	I_R	5.0 500							μA
Typical Junction Capacitance (Note 1)	C_J	40							pF

Thermal-Mechanical Specifications:

Type Number	Symbol	KBJ 4005G	KBJ 401G	KBJ 402G	KBJ 404G	KBJ 406G	KBJ 408G	KBJ 410G	Unit
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	5.5							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ C$
Case Style		KBJ							

Note: 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2. Thermal Resistance from Junction to Case with Device Mounted on 75mm x 75mm x 1.6mmC u Plate Heatsink.

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FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

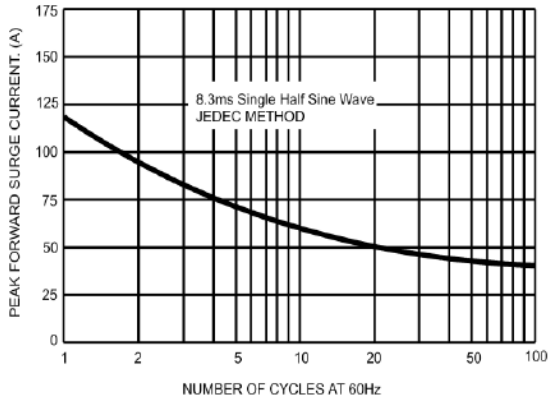


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE PER BRIDGE ELEMENT

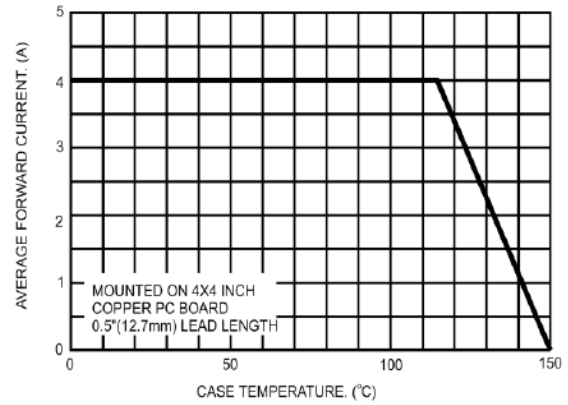


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

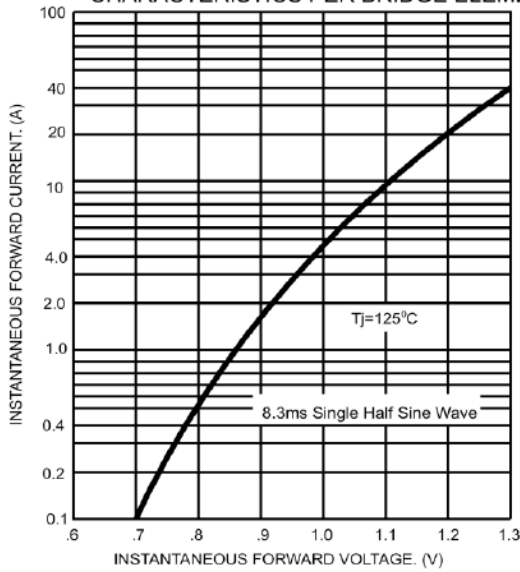
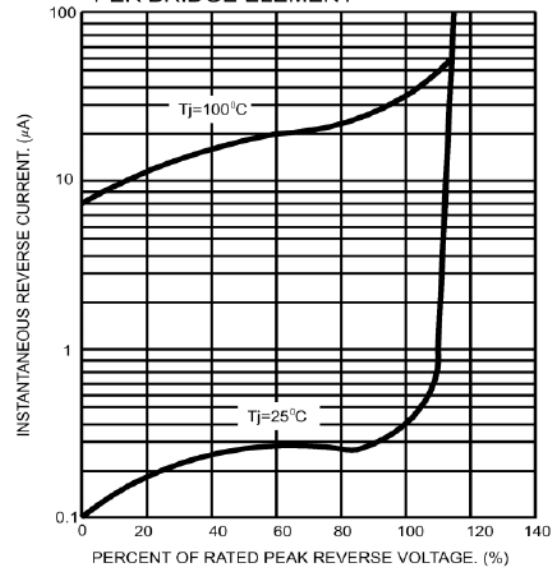


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT





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