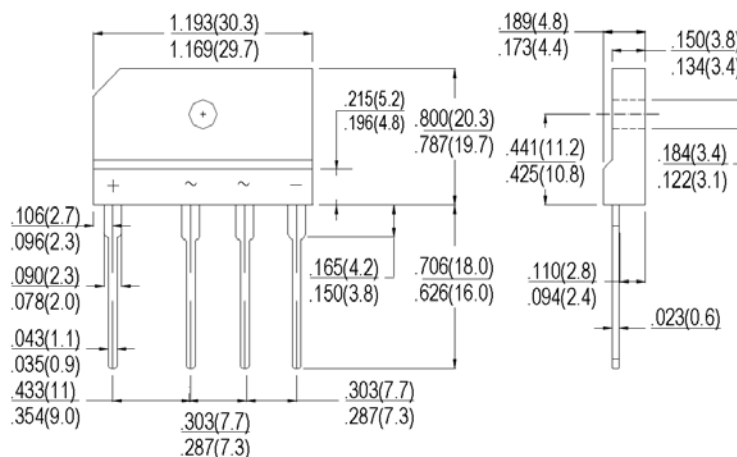


GBJ15005-GBJ1510
Single-Phase 15.0A Glass Passivated Bridge Rectifier
Features:

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data:

- Case: GBJ, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting Position: Any
- Weight: 0.23ounce, 6.6gram
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 0.5 N.m Typical and 0.8 N.m Maximum

Mechanical Dimensions: In Inches/mm

GBJ
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

Ordering Information

Device	Package	Shipping
GBJ15005 THRU GBJ1510	GBJ (Pb-Free)	250pcs / Box

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

Maximum Ratings and Electrical Characteristics Rating at 25°C ambient temperature unless otherwise specified. Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Maximum Ratings:

Type number	Symbol	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	Unit
Maximum Recurrent Peak Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum Average Forward Rectified Current with Heatsink at $T_C=100^{\circ}C$	$I_{(AV)}$	15.0							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200							A

Electrical Characteristics:

Type Number	Symbol	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	Unit
Maximum Forward Voltage (per element) @ $I_F=7.5A$	V_F	1.1							V
Maximum Reverse Current @ $T_A=25^{\circ}C$ At Rated DC Blocking Voltage @ $T_A=125^{\circ}C$	I_R	10 500							μA
Typical Junction Capacitance (Note 1)	C_J	60							pF

Thermal-Mechanical Specifications:

Type Number	Symbol	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	Unit
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	0.8							$^{\circ}C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}C$
Case Style		GBJ							

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 300mm x 300mm x 1.6mm u Plate Heatsink.

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

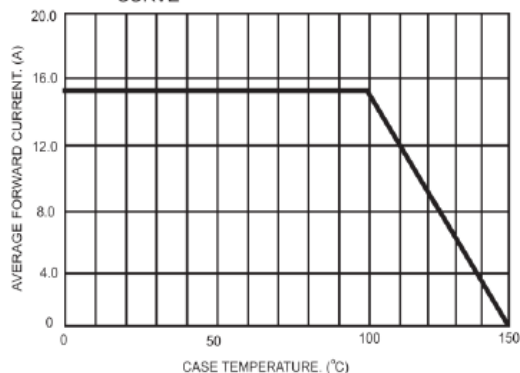


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

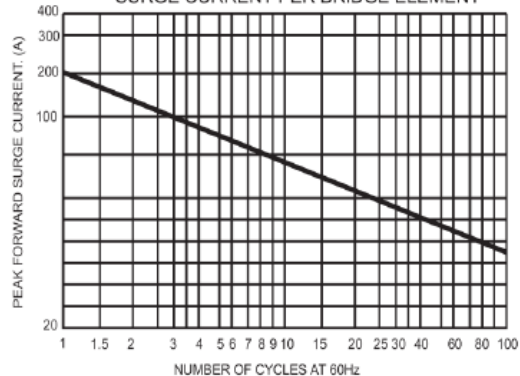


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

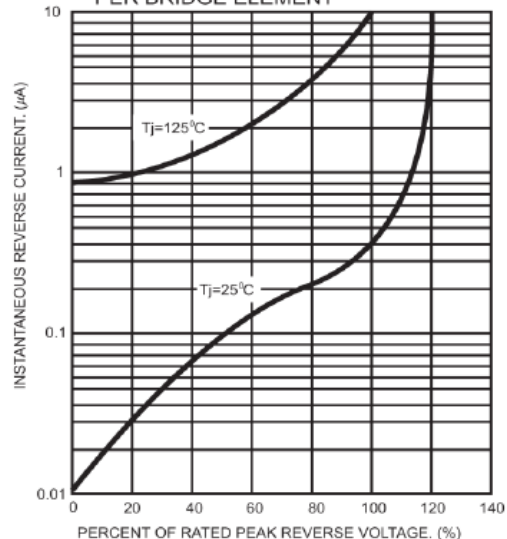


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

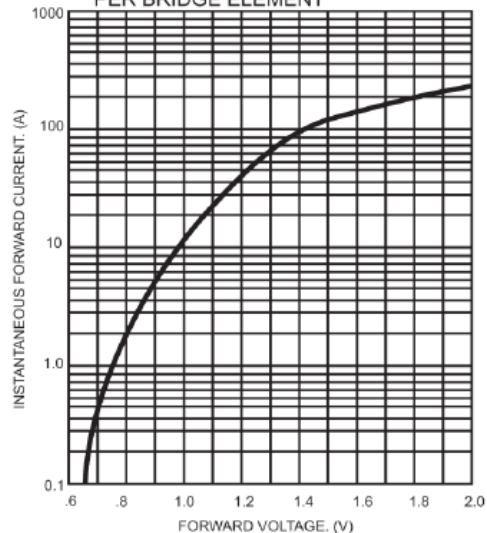
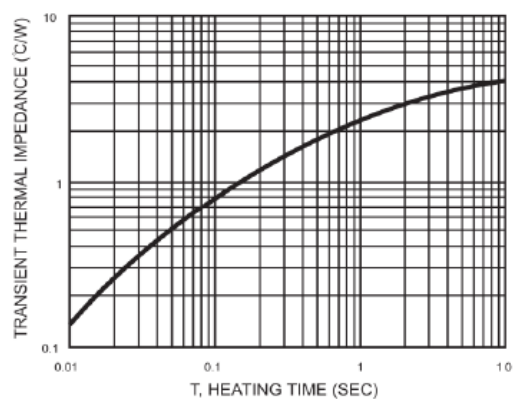


FIG.5- TYPICAL TRANSIENT THERMAL IMPEDANCE



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