GBJ1506LV

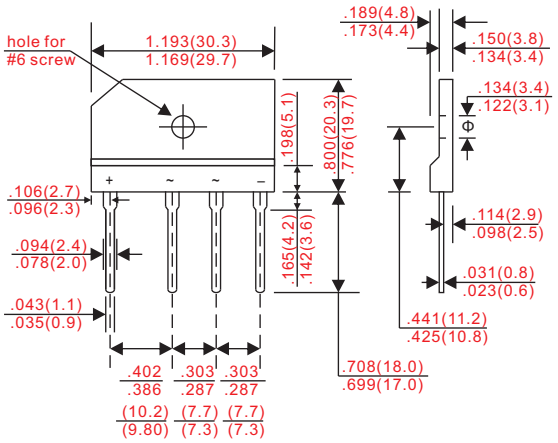
15A Miniature Glass Passivated Single-Phase Bridge Rectifiers

■ Features

- Recommended for non-automatic applications.
- Ideal for & save space on printed circuit board.
- Applicable for automatic insertion.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- Glass passivated chip junctions.
- Suffix "G" indicates Halogen-free part, ex.GBJ1506LVG.
- Lead-free parts meet RoHS requirments.
- UL recognized file # E321971

■ Outline

GBJ



Dimensions in inches and (millimeters)

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, GBJ
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : marked on body
- Mounting Position : Any
- Weight : Approximated 7.00 gram

■ 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%.

Parameter	Symbol	GBJ1506LV	UNIT
Marking code		GBJ1506L	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	
Maximum DC Blocking Voltage	V_{DC}	600	
Maximum Instantaneous Forward Voltage@7.5A, T_A =25°C	V_F	0.9	V
Operating Temperature	T_J	-55 ~ +150	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	Note1	I_O			15	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			240	A
Reverse current	V_R = V_{RRM} T_A = 25°C	I_R			10	uA
	V_R = V_{RRM} T_A = 125°C				500	
I^2t Rating for fusing	t < 8.3 ms	I^2t		240		A^2s
Typical junction capacitance per element	Note2	C_J		60		pF
Thermal resistance		$R_{\theta JC}$		0.8		°C/W
Operating temperature range		T_J	-55		+150	°C
Storage temperature		T_{STG}	-55		+150	°C

Notes : 1.Unit mounted on 300mm x 300mm x 1.6mm Cu plate heatsink.
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

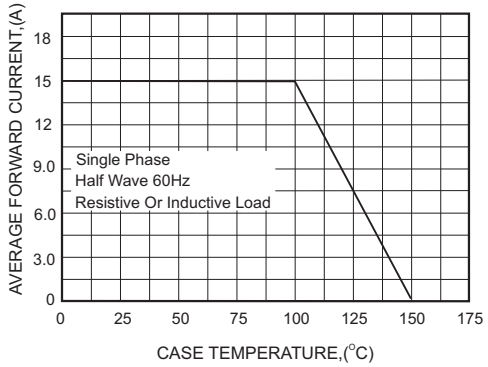


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

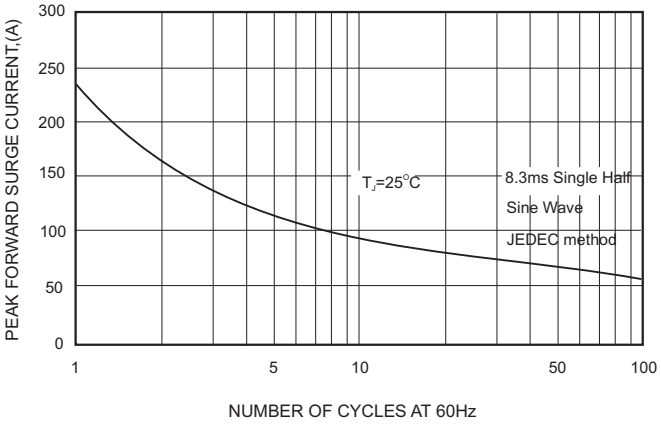


FIG.3-TYPICAL FORWARD CHARACTERISTICS

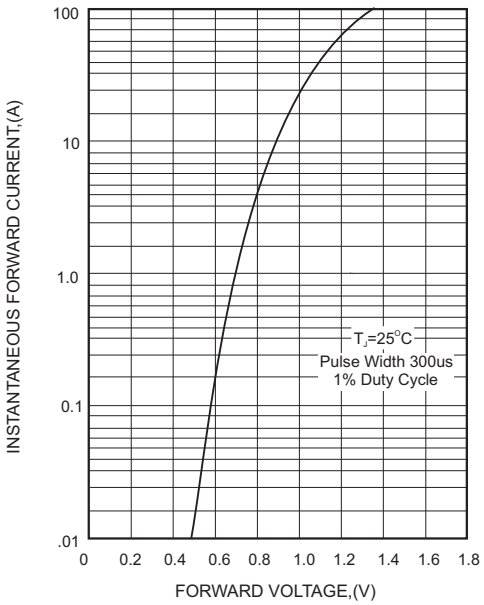
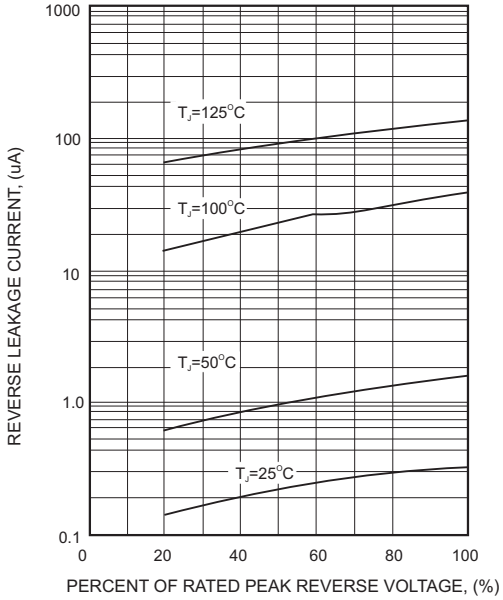


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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