WILLAS

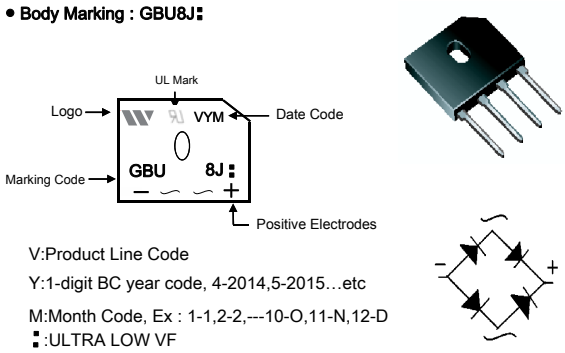
RoHS COMPLIANT

GBU8J-U1

8A GLASS PASSIVATED ULTRA LOW VF BRIDGE RECTIFIERS - 600V

PRIMARY CHARACTERISTICS	
V_{RRM}	600V
$I_{(AV)}$	8.0A
V_F	0.89V
I^2t	166A^2s
$T_{J,Max}$	150℃

GBU(R) PACKAGE



FEATURES

- Surge overload rating -200 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case：Molded plastic,GBU(R)
- Polarity：Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	GBU8J-U1	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward (with heatsink Note 2) Rectified Current @ T_C=100℃ (without heatsink)	$I_{(AV)}$	8.0 2.9	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	200	A
Maximum Forward Voltage at 4.0A DC	V_F	0.89	V
Maximum DC Reverse Current @ T_J=25℃ at Rated DC Blocking Voltage @ T_J=125℃	I_R	10.0 500	μA
I^2t Rating for Fusing (t<8.3ms)	I^2t	166	A^2s
Typical Junction Capacitance Per Element (Note1)	C_J	60	pF
Typical Thermal Resistance	$R_{\theta JC}$	2.2	℃/W
Operating Temperature Range	T_J	-55 to +150	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Device mounted on 75mm*75mm*1.6mm Cu plate heatsink.

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FIG.1-FORWARD CURRENT DERATING CURVE

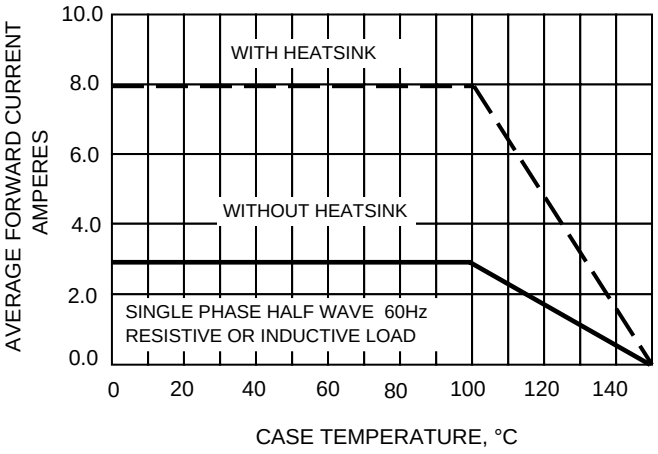


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

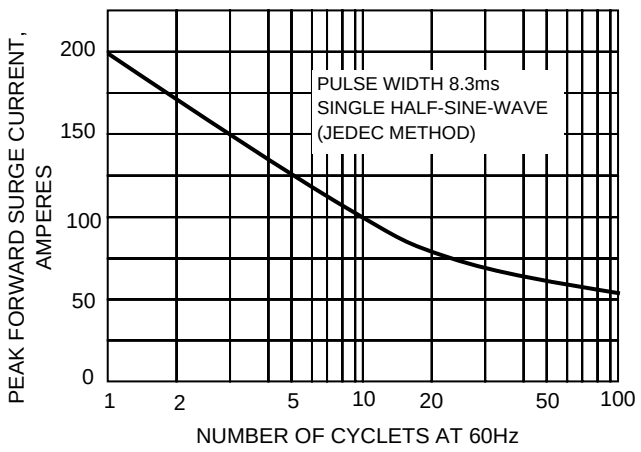


FIG.3-TYPICAL JUNCTION CAPACITANCE

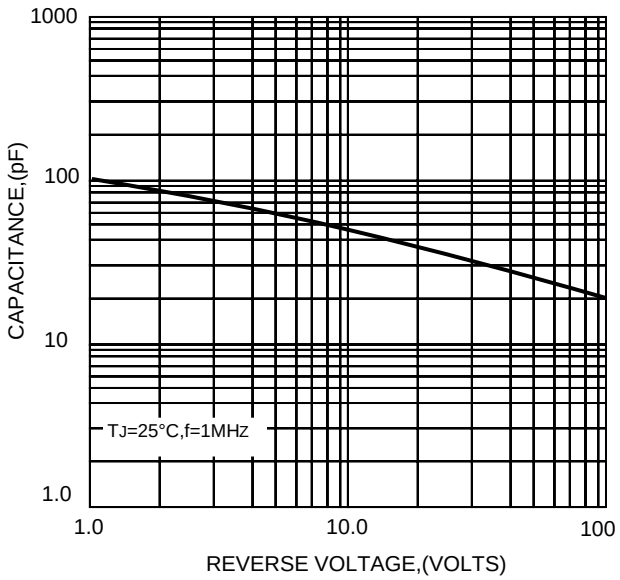


FIG.4-TYPICAL FORWARD CHARACTERISTICS

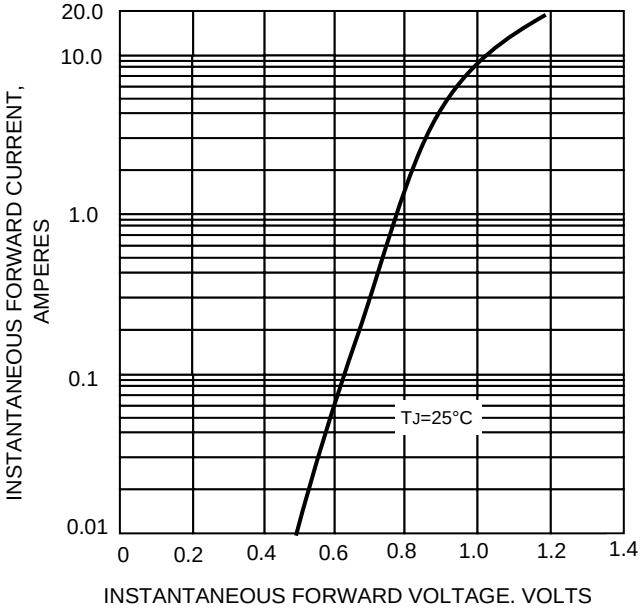
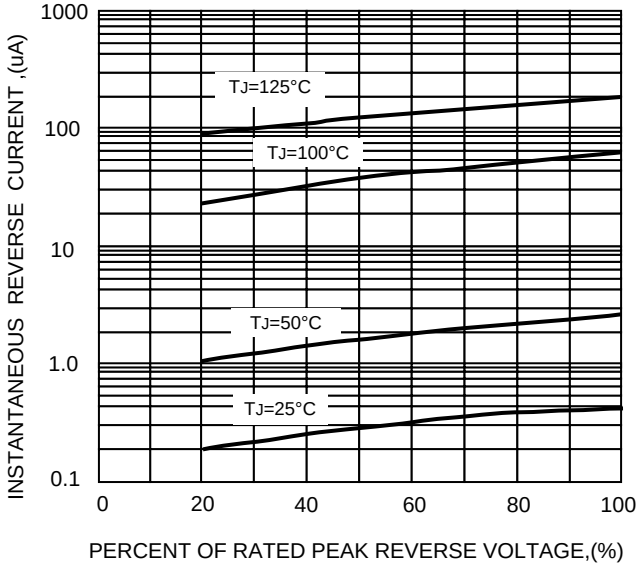


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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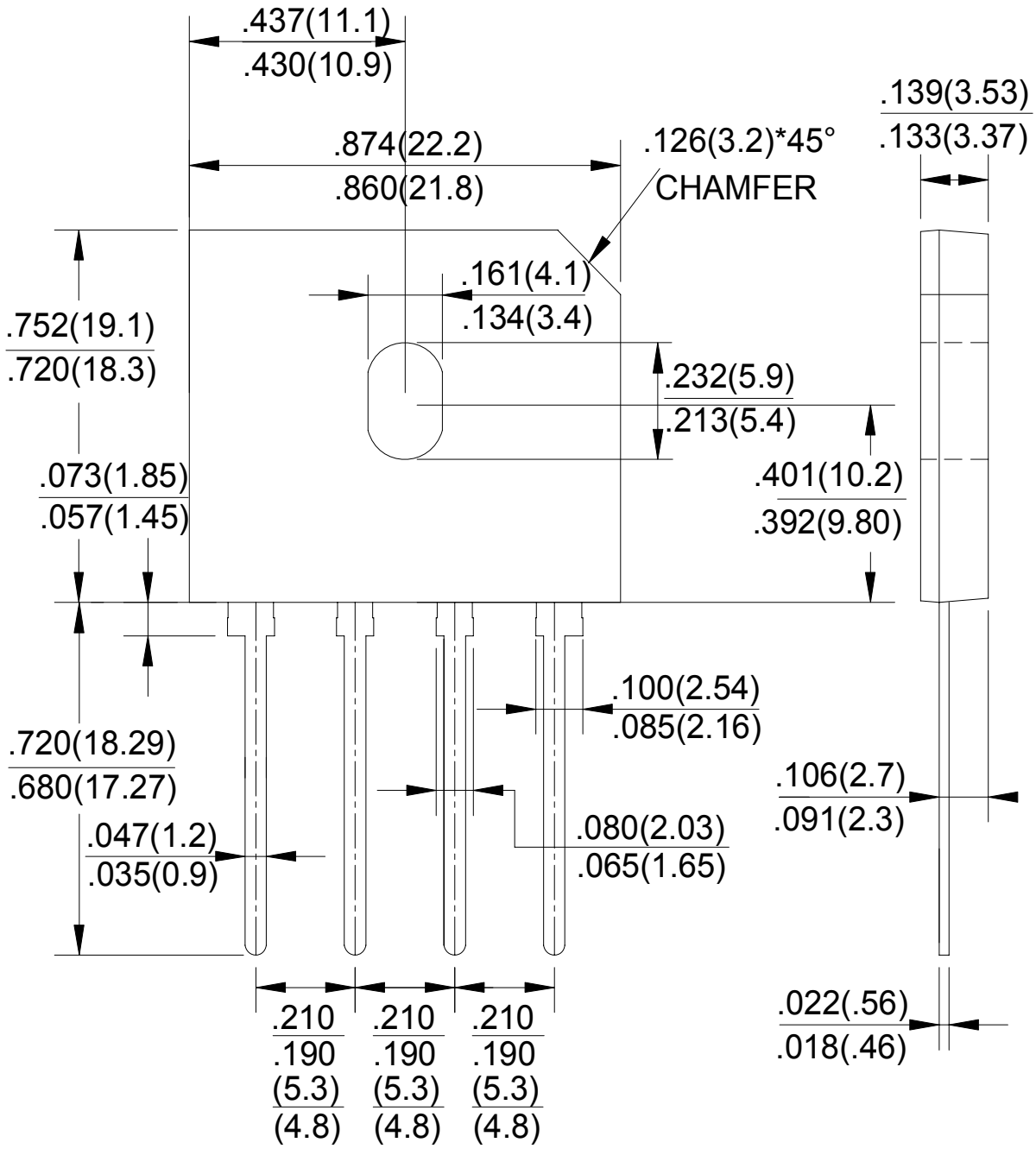
Outline Drawing

GBU(R)



Dimensions in inches and (millimeters)

Rev.B-1

Ordering Information:

Device PN	Packing
GBU8J-U1 $^{(1)}$G$^{(2)}$-WS	Tube Packing:20pcs/Tube; 1000pcs/Box

Note: 1. Packing code: Empty is Tube Packing

2. RoHS product for packing code suffix ”G”, Halogen free product for packing code suffix "H" .