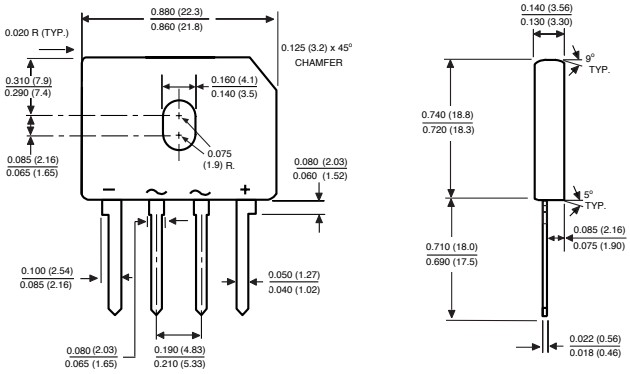
G5SBA20 AND G5SBA60

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

Reverse Voltage - 200 and 600 Volts **Forward Current -** 6.0 Amperes

Case Style GBU



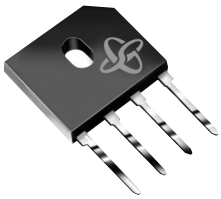
Polarity shown on front side of case, positive lead beveled corner.

If preferred, marking may be on reverse side of case.

Lead forming option with 10mm-7.5mm-7.5mm spacing is available.

Dimensions in inches and (millimeters)

FEATURES



- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under the Recognized Component Index, file number E54214
- High case dielectric strength of 1500 V_{RMS}
- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375 (9.5mm) lead length, 5lbs. (2.3kg) tension

MECHANICAL DATA

Case: Molded plastic body over passivated junctions

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Mounting Position: Any (NOTE 3)

Mounting Torque: 5 in. - lb. max.

Weight: 0.15 ounce, 4.0 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	G5SBA20	G5SBA60	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	600	Volts
Maximum RMS voltage	V_{RMS}	140	420	Volts
Maximum DC blocking voltage	V_{DC}	200	600	Volts
Maximum average forward rectified output current at T_C=100°C (NOTE 1) / T_A=25°C (NOTE 2)	$I_{(AV)}$	6.0 2.8		Amps
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150		Amps
Rating for fusing (t<8.3ms)	I^2t	60		A^2sec
Maximum instantaneous forward voltage drop per leg at 3.0A	V_F	1.05		Volts
Maximum DC reverse current at rated DC blocking voltage per leg T_A=25°C / T_A=125°C	I_R	5.0 500		μA
Typical thermal resistance per leg (NOTE 2) / (NOTE 1)	$R_{\Theta JA}$ $R_{\Theta JC}$	22 3.4		°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150		°C

NOTES:

(1) Unit case mounted on Al plate heatsink.

(2) Units mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads and 0.375" (9.5mm) lead length

(3) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

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FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

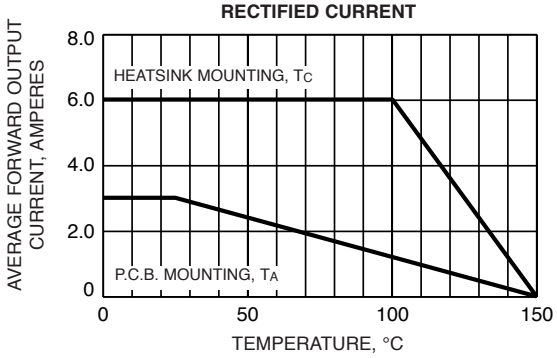


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

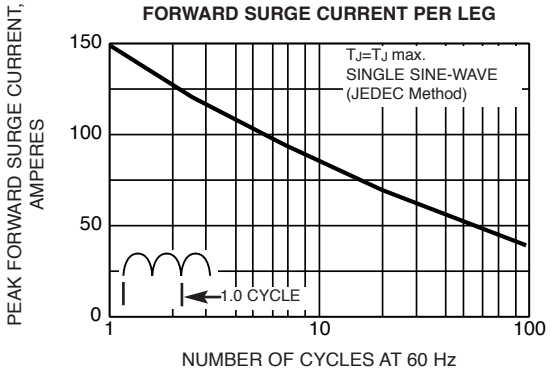


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

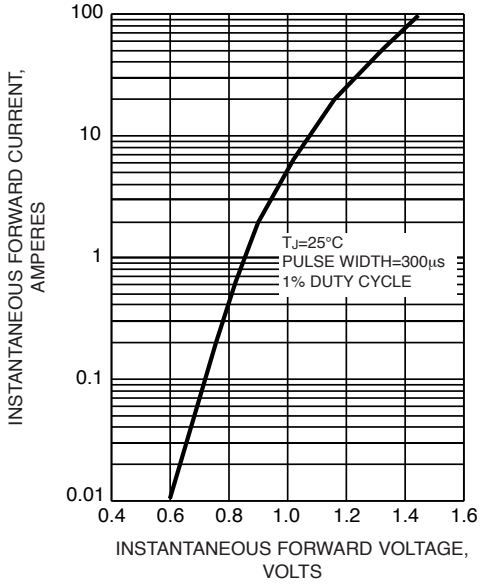


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

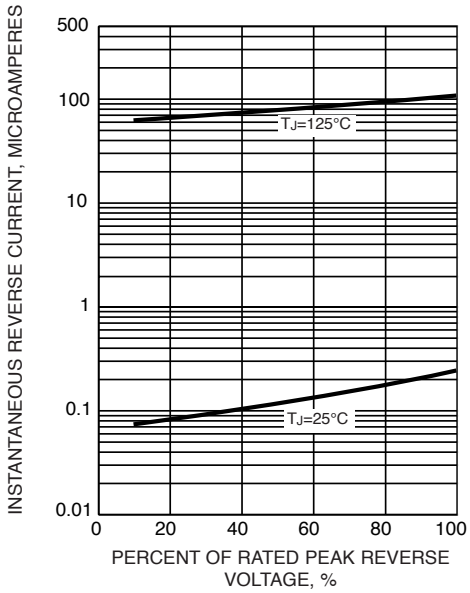


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

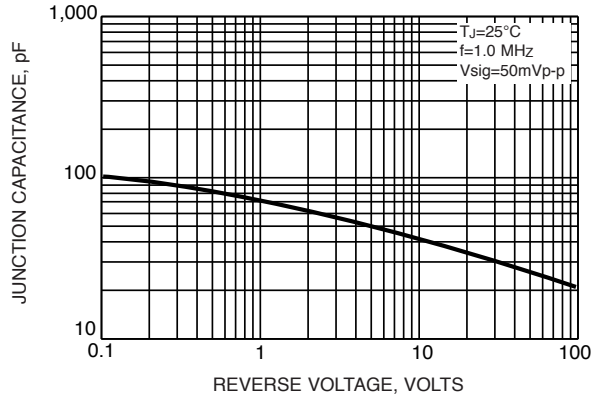
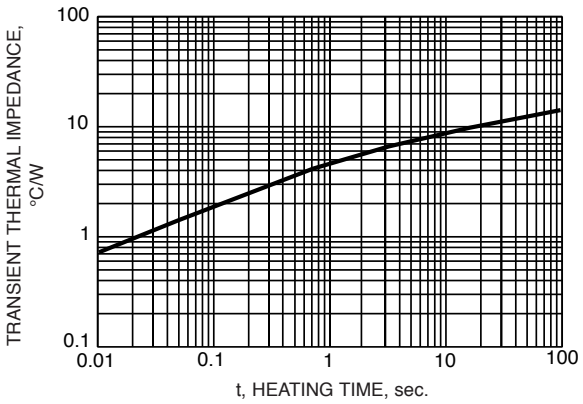


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE



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