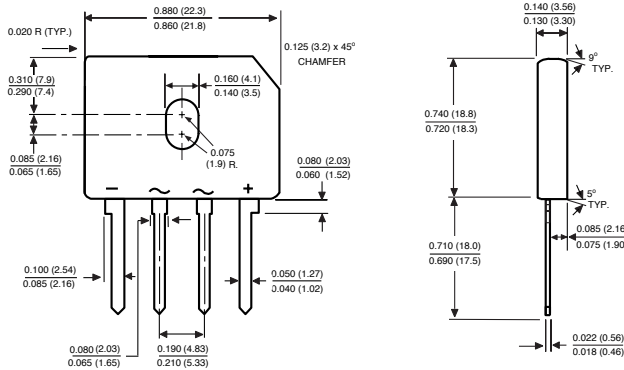


G5SBA20 AND G5SBA60

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.

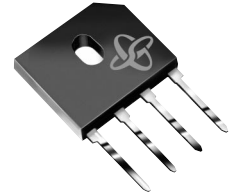
If preferred, marking may be on reverse side of case.

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 VRMS
- ◆ 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 $T_C=100^\circ\text{C}$ (NOTE 1) $T_A=25^\circ\text{C}$ (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 ($t < 8.3\text{ms}$)	I^2t	60		A ² sec
Maximum instantaneous forward voltage drop per leg at 3.0A	V_F	1.05		Volts
Maximum DC reverse current at $T_A=25^\circ\text{C}$ rated DC blocking voltage per leg $T_A=125^\circ\text{C}$	I_R	5.0 500		μA
Typical thermal resistance per leg (NOTE 2) (NOTE 1)	$R_{\theta JA}$ $R_{\theta JC}$	22 3.4		$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150		$^\circ\text{C}$

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

RATINGS AND CHARACTERISTICS CURVES G5SBA20 THRU G5SBA60

FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

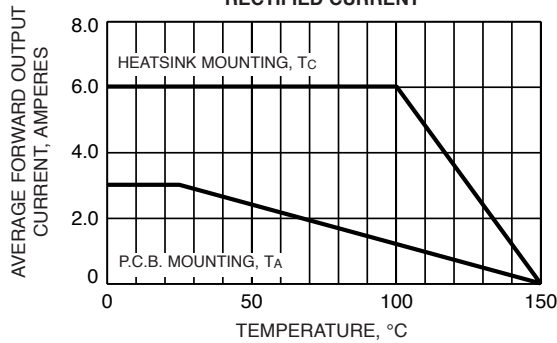


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

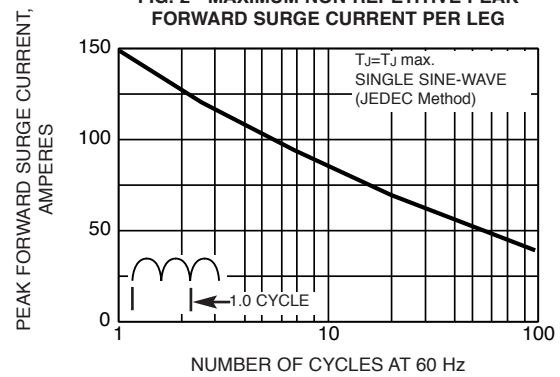


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

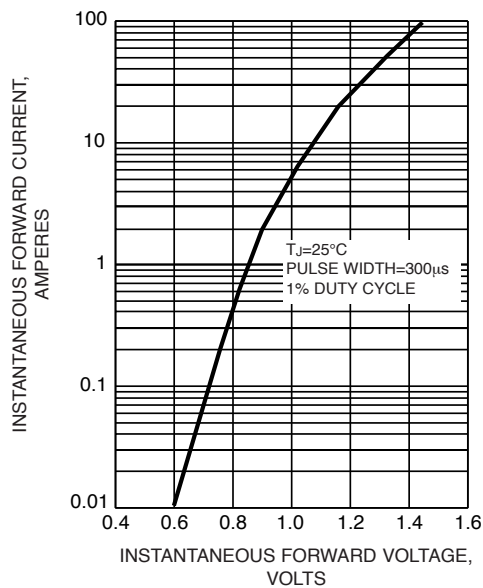


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

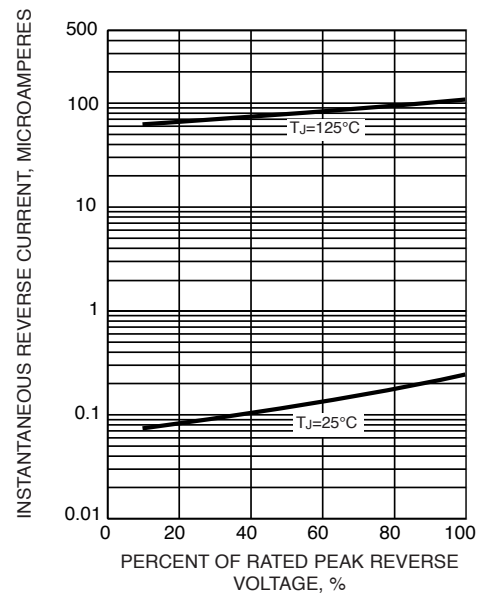


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

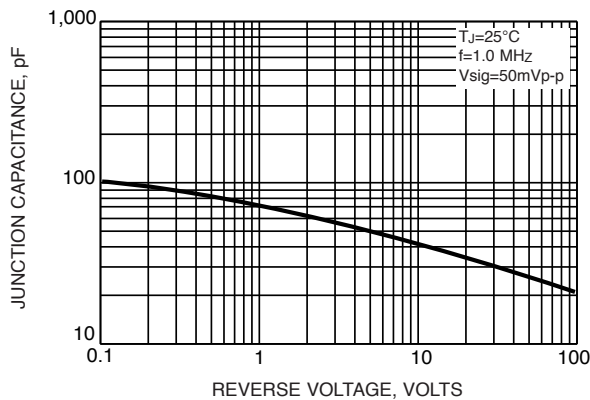


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

