

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**

VOLTAGE RANGE 50 to 1200 Volts CURRENT 1.5 Ampere

FEATURES

- * Surge overload rating - 60 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any
- * Weight: 1.0 gram

MECHANICAL DATA

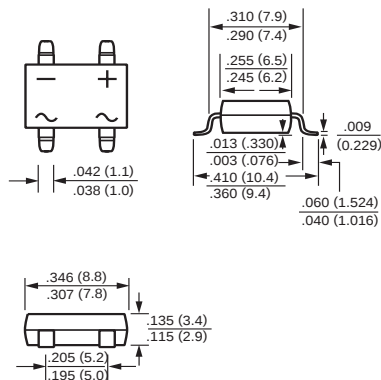
- * Epoxy : Device has UL flammability classification 94V-0
- * UL listed the recognized component directory, file #E94233

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



DB-S



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	DB1512S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	1200	Volts
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	840	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	1200	Volts
Maximum Average Forward Output Current at $T_A = 40^\circ\text{C}$	I_O	1.5								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60								Amps
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JL}$	40 15								$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150								$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	DB1512S	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.5A DC	V_F	1.1								Volts
Maximum Reverse Current at rated	I_R	5.0								μAmps
DC Blocking Voltage per element		0.5								mAmps

NOTE: Suffix "-s" Surface Mount for Dip Bridge.

RATING AND CHARACTERISTIC CURVES (DB151S THRU DB1512S)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

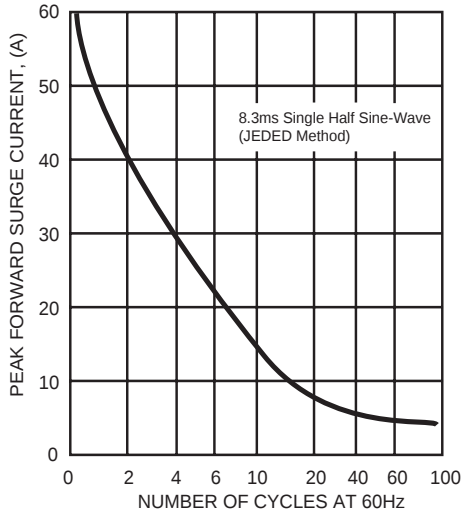


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

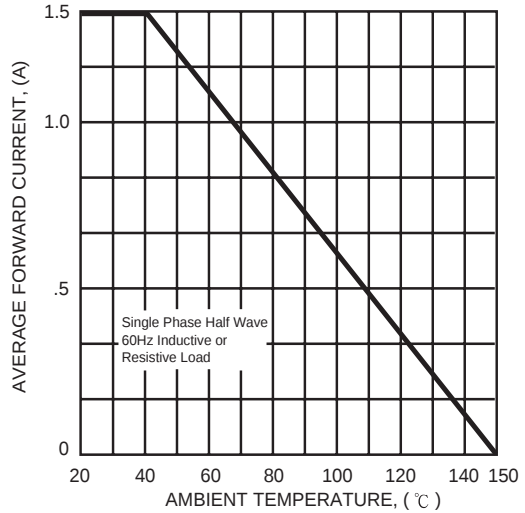


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

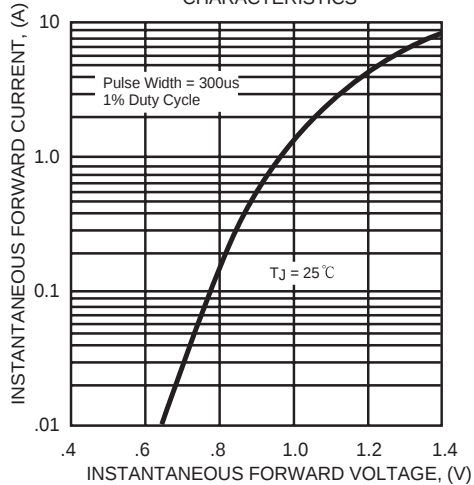
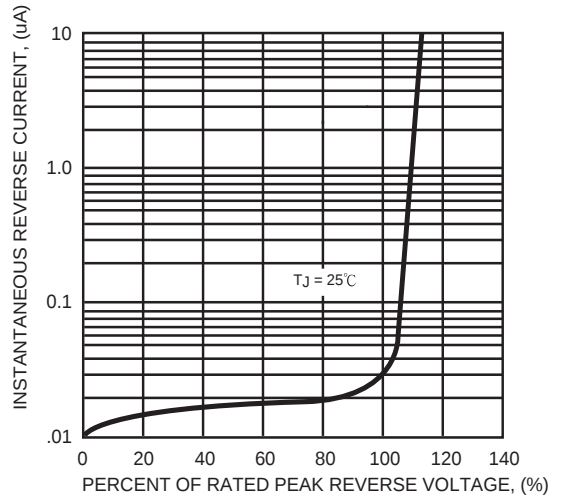
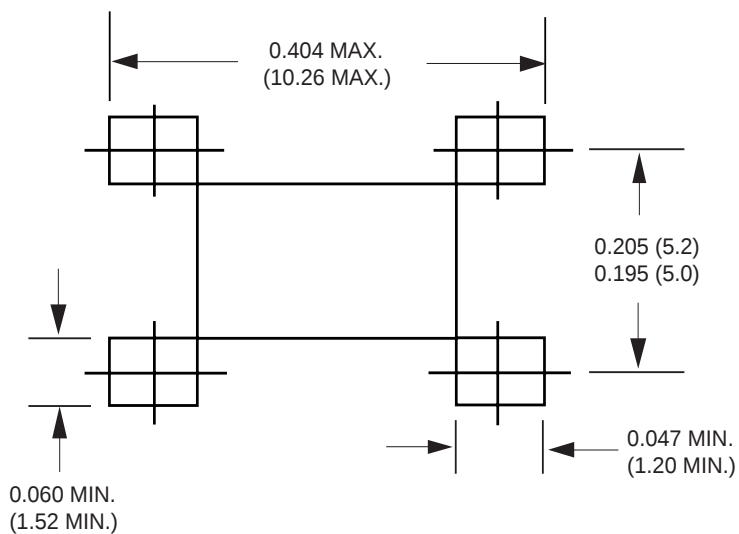


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



Mounting Pad Layout



Dimensions in inches and (millimeters)