

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 1200 to 1400 Volts CURRENT 1.0 Ampere

FEATURES

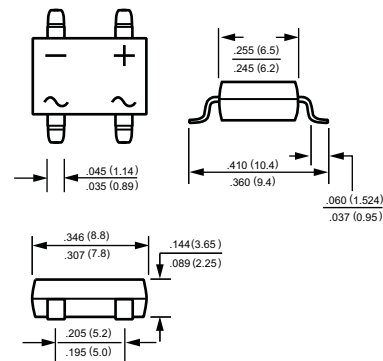
- * Good for automation insertion
- * Surge overload rating - 50 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0



DB-S



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.

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

RATINGS	SYMBOL	DB1012S	DB1014S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1200	1400	Volts
Maximum RMS Bridge Input Voltage	V_{RMS}	840	980	Volts
Maximum DC Blocking Voltage	V_{DC}	1200	1400	Volts
Maximum Average Forward Output Current at $T_A = 40^\circ\text{C}$	I_O	1.0		Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30		Amps
Typical Current Squared Time	I^2t	3.73		A^2/Sec
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40		$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	15		
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	DB1012S	DB1014S	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	V_F	1.2		Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@ $T_A = 25^\circ\text{C}$	1.0		uAmps
	@ $T_A = 125^\circ\text{C}$	0.05		

Note: 1. "ROHS compliant".

2. Thermal Resistance: Mounted on PCB.

2022-09/97
REV:C

RATING AND CHARACTERISTICS CURVES (DB1012S,DB1014S)

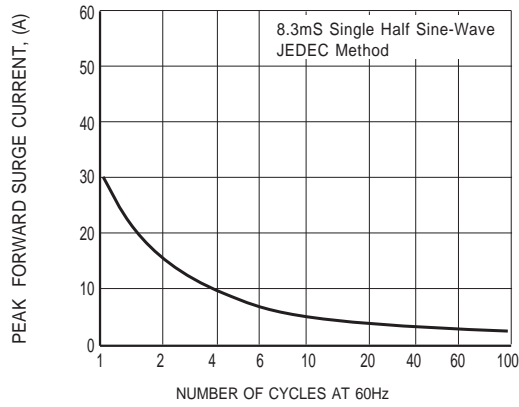


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

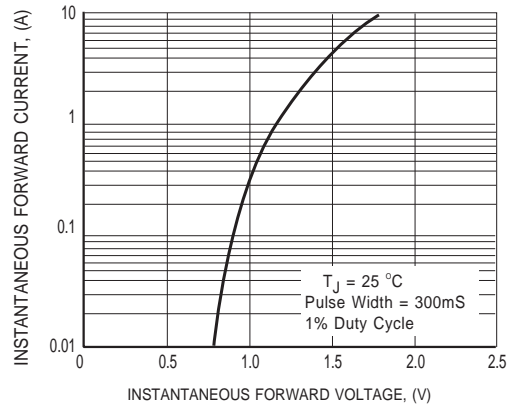


FIG. 2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

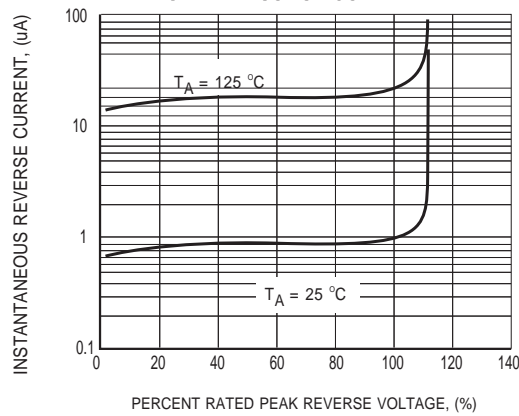


FIG. 3 MAXIMUM REVERSE CHARACTERISTICS

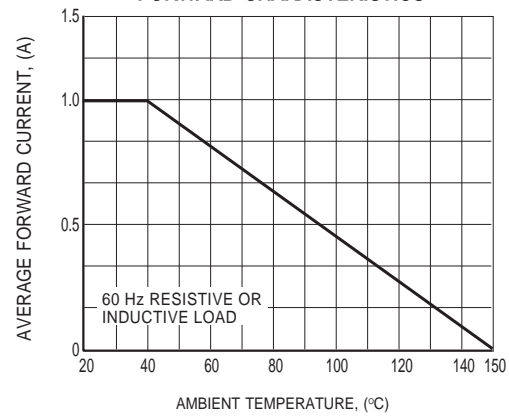
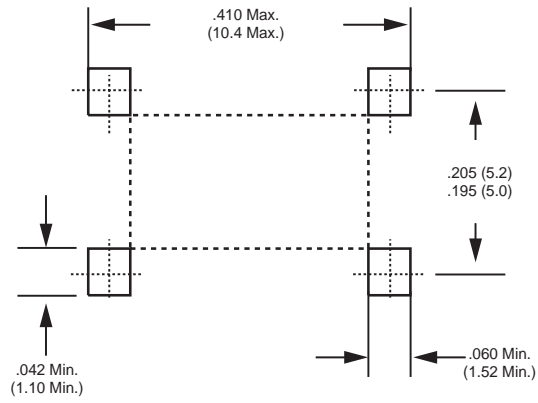


FIG. 4 TYPICAL FORWARD CURRENT DERATING CURVE

Mounting Pad Layout



Dimensions in inches and (millimeters)

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DB-S	-T/W	1,000	1,000	9.5	52	330	360*355*360	8,000	9.8

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