

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

**VOLTAGE 1200 Volts CURRENT 1.0 Ampere**

**FEATURES**

- \* 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
- \* Weight: 1.0 gram

**MECHANICAL DATA:**

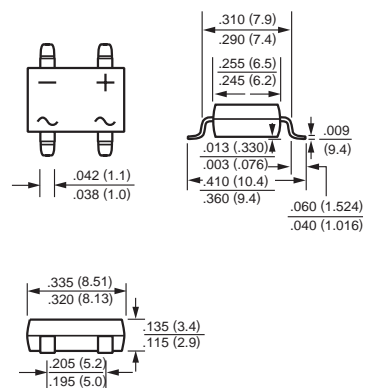
- \* Epoxy : UL flammability classification 94V-0

**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**



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

RATINGS	SYMBOL	DB1012S	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	1200	Volts
Maximum RMS Bridge Input Voltage	$V_{RMS}$	840	Volts
Maximum DC Blocking Voltage	$V_{DC}$	1200	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)	$I_{FSM}$	50	Amps
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	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	$V_F$	1.1	Volts
Maximum Reverse Current at rated	$I_R$	5.0	$\mu\text{Amps}$
DC Blocking Voltage per element		0.5	mAmps

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

## RATING AND CHARACTERISTIC CURVES OF DB1012S

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

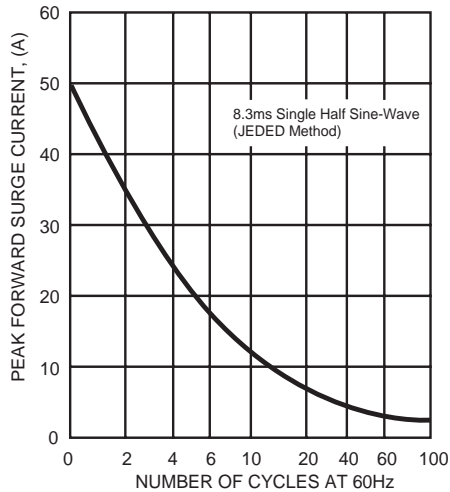


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

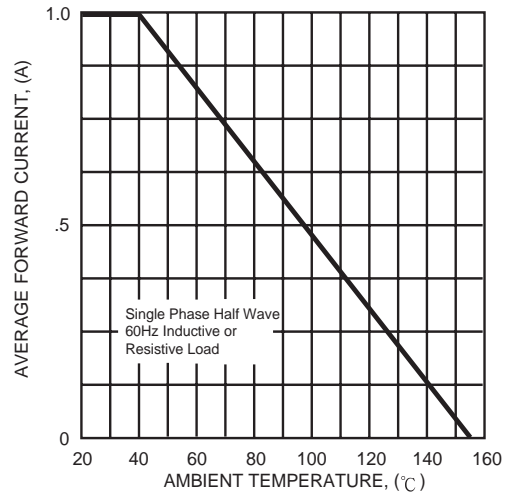


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

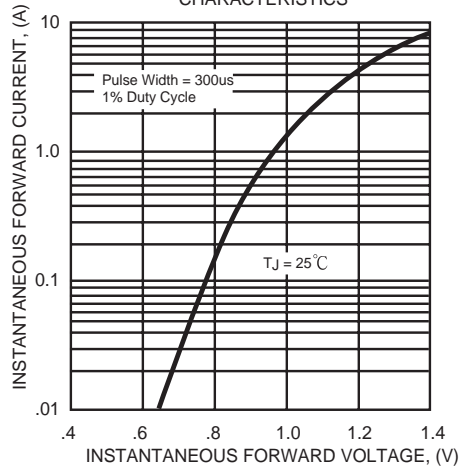


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

