

SINGLE-PHASE GLASS PASSIVATED SILICON SURFACE MOUNT BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Amperes

**FEATURES**

- \* Good for automation insertion
- \* 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

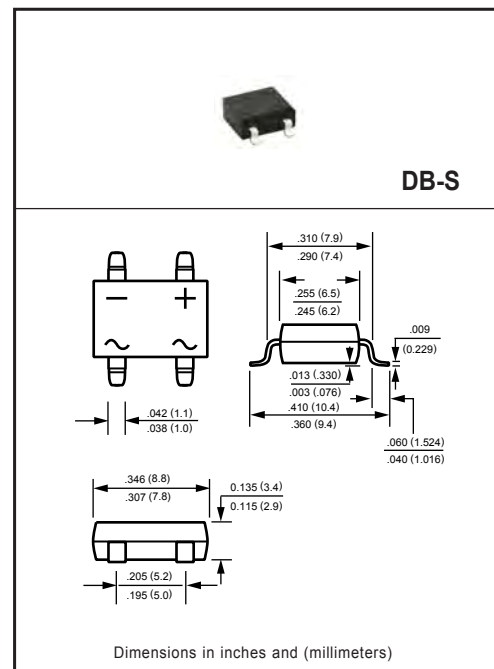
**Pb-Free package is available**

RoHS product for packing code suffix "G"

Halogen free product for packing code suffix "H"

**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	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at $T_A = 40^\circ\text{C}$	$I_O$	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	60							Amps
Typical Current Squared Time	$I^2T$	14.9							A·S
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	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	UNITS
Maximum Forward Voltage Drop per Bridge Element at 2.0A DC	$V_F$	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	$I_R$	5.0							uAmps
		0.5							

Note: 1. "Fully ROHS compliant", "100% Sn plating (Pb-free).  
2. Thermal Resistance: Mounted on PCB.

2009-12  
REV: A



# WILLAS



DB201S  
THRU  
DB207S

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## RATING AND CHARACTERISTICS CURVES

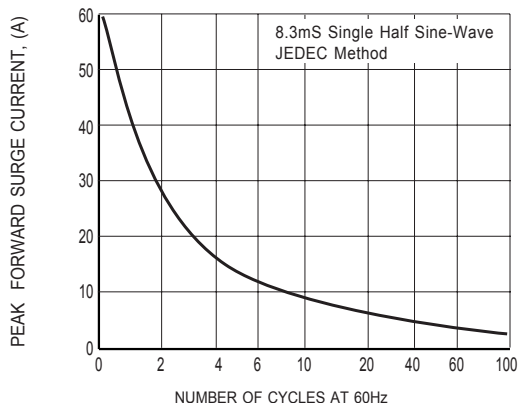


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

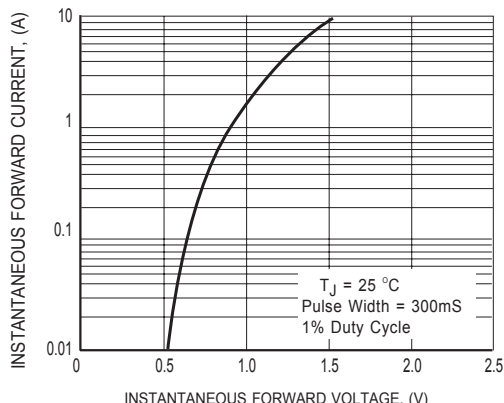


FIG. 2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

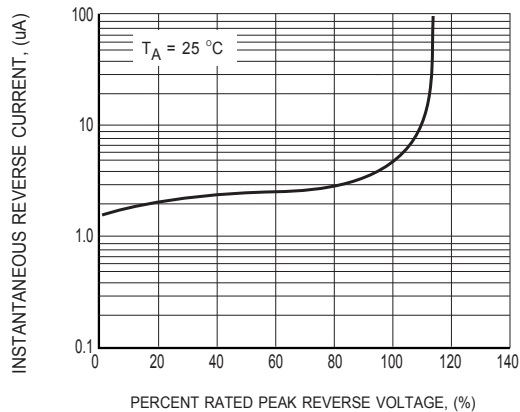


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

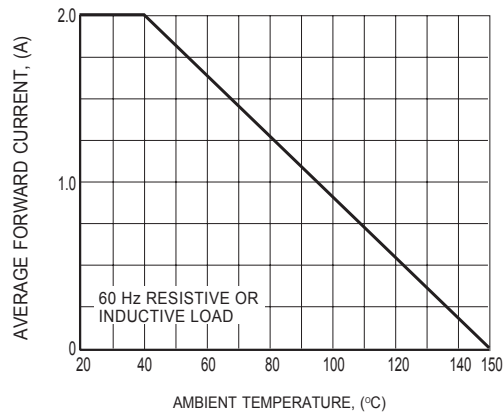


FIG. 4 TYPICAL FORWARD CURRENT DERATING CURVE