



## FEATURES

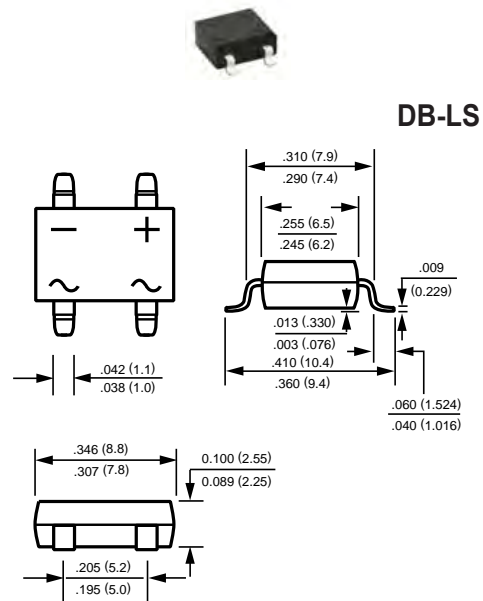
- \* Good for automation insertion
- \* Surge overload rating - 60 amperes peak
- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded
- \* Glass passivated device
- \* Polarity symbols molded on body
- \* Mounting position: Any
- \* Weight: 0.3 gram
- \* **Pb-Free package is available**  
RoHS product for packing code suffix "G"  
Halogen free product for packing code suffix "H"

## MECHANICAL DATA

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

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	DB201LS	DB202LS	DB203LS	DB204LS	DB205LS	DB206LS	DB207LS	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							$\text{A}^2\text{S}$
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
	$R_{\theta JC}$	32							
	$R_{\theta JL}$	22							
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	DB201LS	DB202LS	DB203LS	DB204LS	DB205LS	DB206LS	DB207LS	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							$\mu\text{Amps}$
		0.5							mAmps

Note: 1. "Fully ROHS compliant", "100% Sn plating (Pb-free)."

2. Thermal Resistance: Mounted on PCB.

3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.



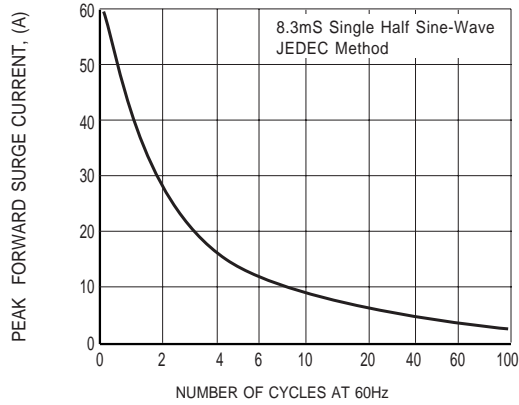
# WILLAS



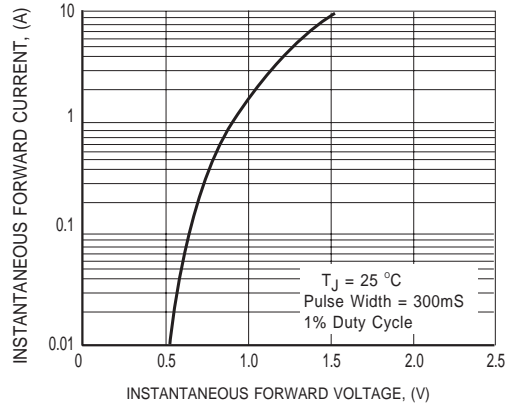
**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Amperes

**DB201LS  
THRU  
DB207LS**

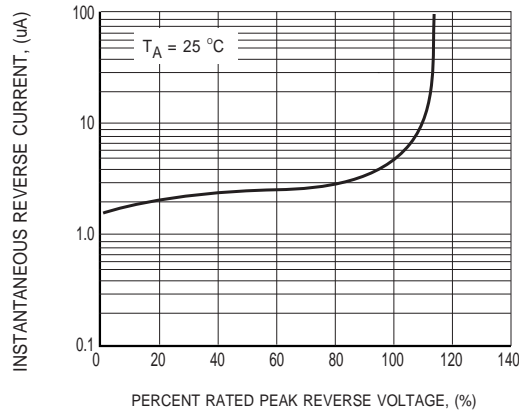
## RATING AND CHARACTERISTICS CURVES



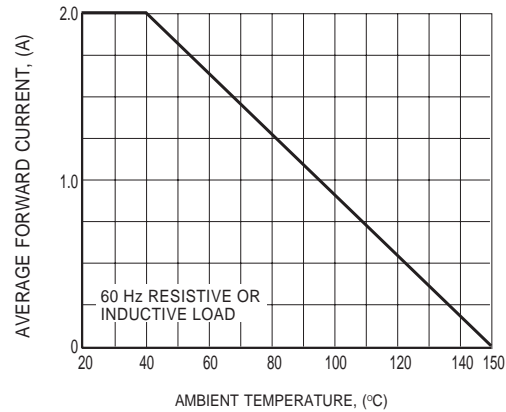
**FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

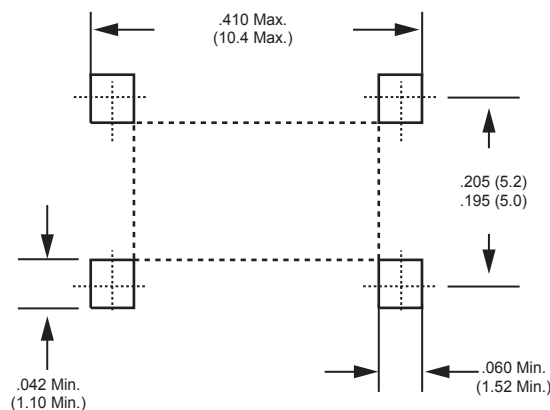


**FIG. 3 TYPICAL REVERSE CHARACTERISTICS**



**FIG. 4 TYPICAL FORWARD CURRENT DERATING CURVE**

## Mounting Pad Layout



Dimensions in inches and (millimeters)