

# SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

# DB101S THRU DB107S

Vishaymas General Semiconductor

### FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed:  
 250°C/10 seconds / 0.375"(9.5mm)  
 lead length at 5 lbs., (2.3kg) tension
- Small size, simple installation  
 Leads solderable per MIL-STD-202,  
 Method 208
- High surge current capability

### MECHANICAL DATA

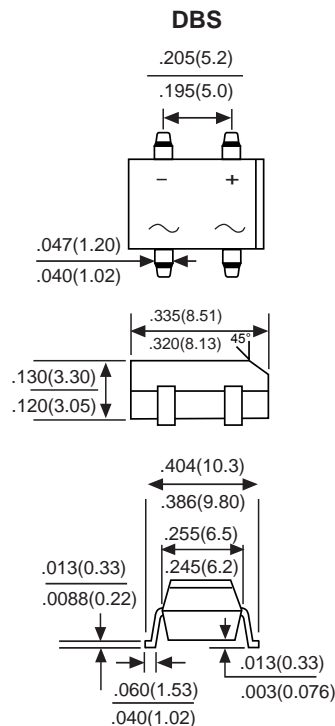
**Case:** Molded plastic body

**Terminals:** Plated leads solderable per  
 MIL-STD-750, Method 2026

**Polarity:** Polarity symbols marked on case

**Mounting Position:** Any

**Weight:** 0.02 ounce, 0.4 grams



Dimensions in inches and (millimeters)

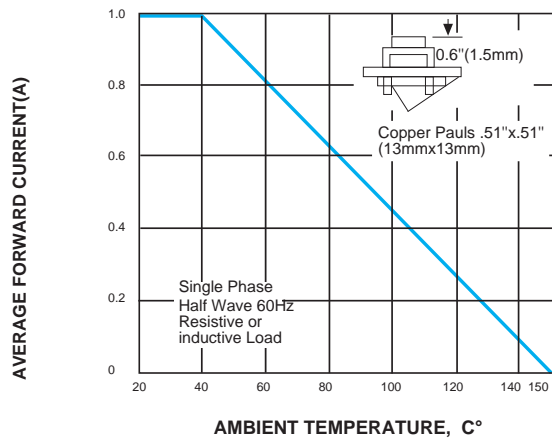
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

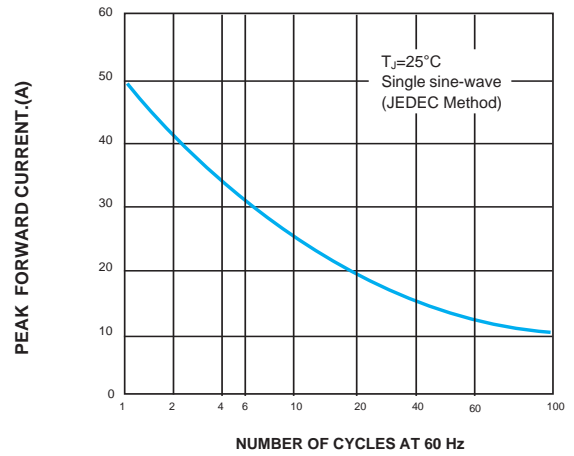
CHARACTERISTICS	SYMBOLS	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_A=40^\circ\text{C}$	$I_{F(AV)}$	1.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50							Amps
Maximum instantaneous forward voltage drop per bridge element at 1.0A	$V_F$	1.1							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$ $\mu\text{A}$
Operating temperature range	$T_J$	-55 to +150							$^\circ\text{C}$
storage temperature range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

NOTES: DBS for surface mount package.

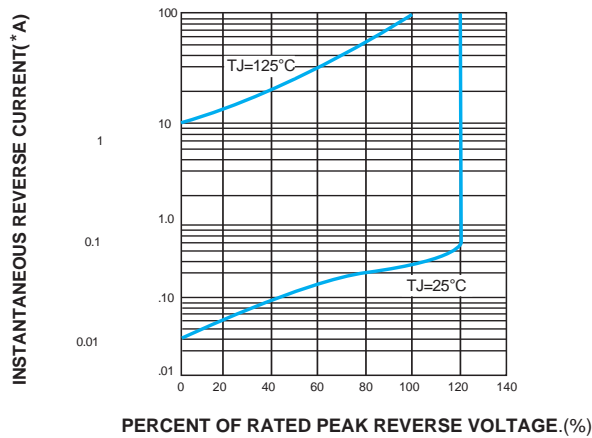
**FIG. 1- MAXIMUM DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



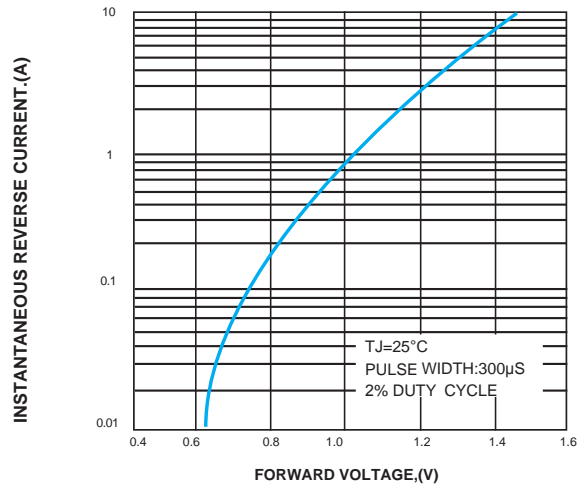
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**



**FIG. 4-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT**



**FIG. 3-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT**

