

# DB101 THRU DB107

## Single Phase 1.0 AMPS. Glass Passivated Bridge Rectifiers

Voltage Range 50 to 1000 Volts Current 1.0 Amperes

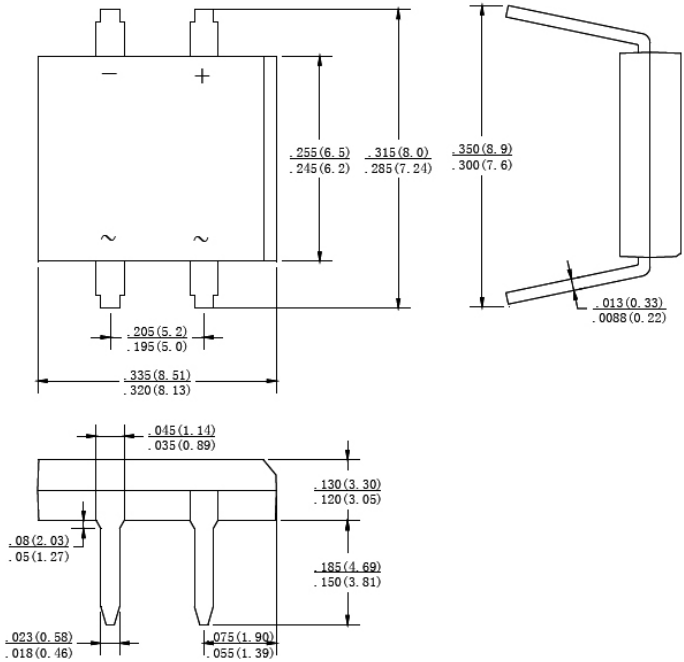
DB

### FEATURES

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction technique results in inexpensive product
- ◆ High temperature soldering guaranteed:  
260°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension
- ◆ UL Recognized File number: E347214

### MECHANICAL DATA

- ◆ Case: Molded plastic
- ◆ Lead: solder plated
- ◆ Polarity: As marked



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

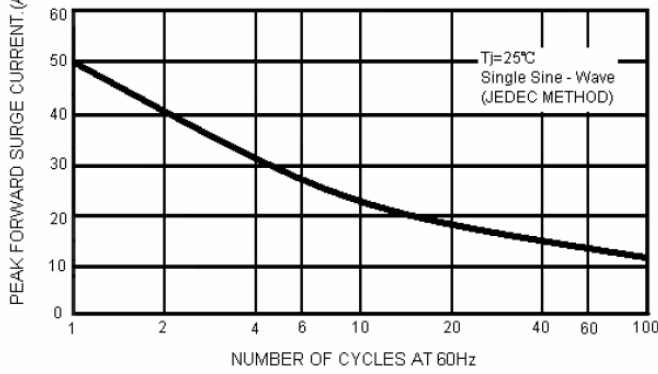
	SYMBOLS	DB101	DB102	DB103	DB104	DB105	DB106	DB107	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_A=40^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	50							A
Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ rated DC blocking voltage per leg $T_A=125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$
Typical Thermal Resistance (Note)	$R_{\theta JA}$ $R_{\theta JL}$	40 15							$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

**Note:** Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.47×0.47" (12×12mm) Copper Pads.

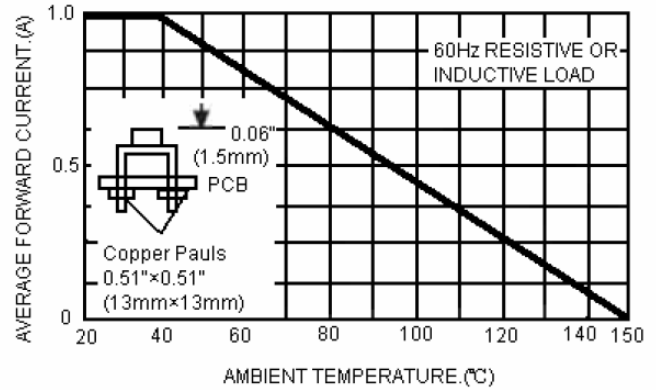
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## RATING AND CHARACTERISTIC CURVES DB101 THRU DB107

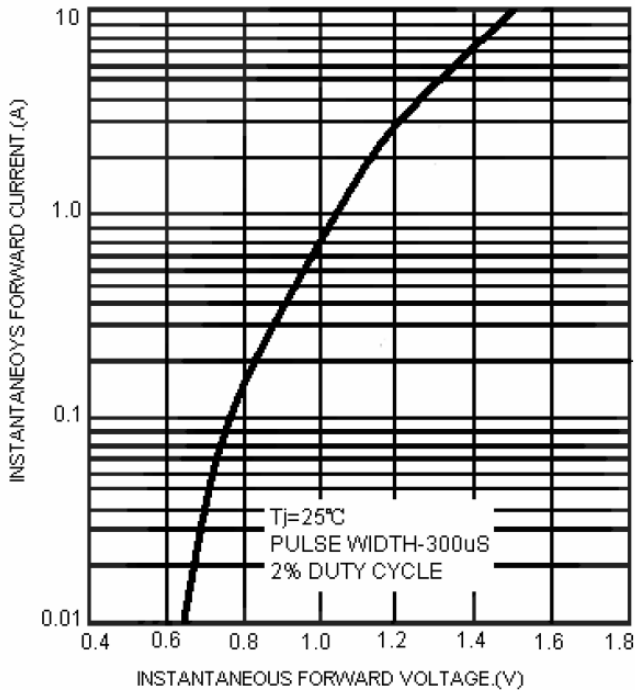
**FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMNT**



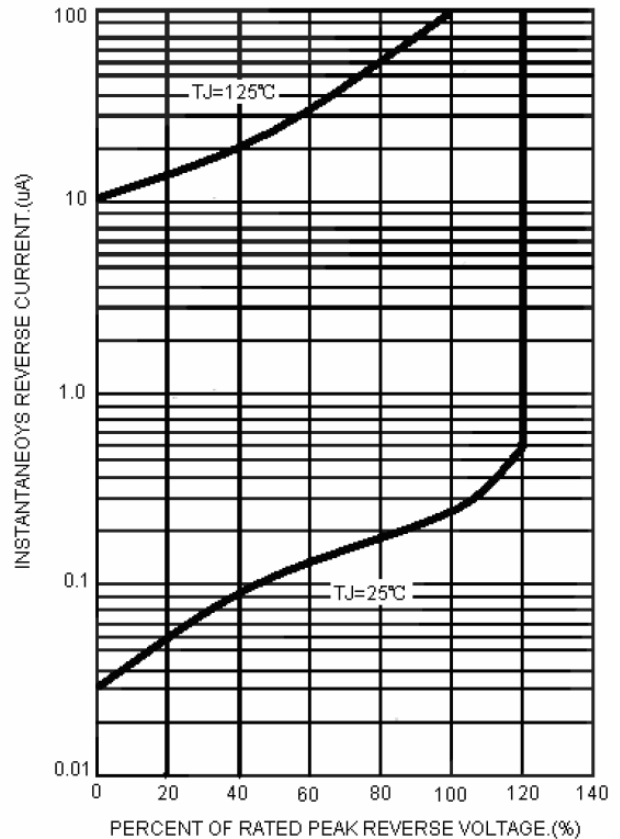
**FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE**



**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT**



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



Note: Specifications are subject to change without notice.