



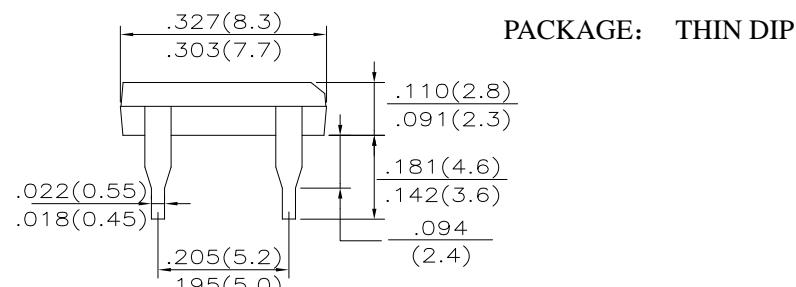
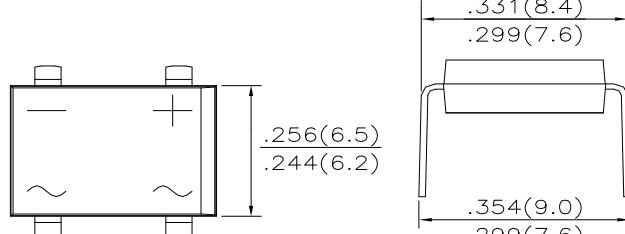
DB101 THRU DB107

1.0A SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

RECTIFIER REVERSE VOLTAGE 50 TO 1000V

FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead tin Pb/Sn copper
- The plastic material has UL flammability classification 94V-0



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Polarity: As marked on Body
- Weight: 0.02 ounces, 0.38 grams
- Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	DB 101	DB 102	DB 103	DB 104	DB 105	DB 106	DB 107	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Input 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 Rectified Output Current @ T _A = 40°C	I _(AV)				1.0				A
Peak Forward Surge Current Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}				50				A
Maximum Instantaneous Forward Voltage drop per Element at I _F = 1.0A	V _F				1.1				V
Maximum Reverse DC Current at Rated @ T _A = 25°C DC Blocking Voltage per Element @ T _A = 100°C	I _R				10				uA mA
Typical Thermal Resistance (Note 1)	R _{qJA}				40				K/W
Storage and Operating Temperature Range	T _{J,TSTG}				-55 to +150				°C

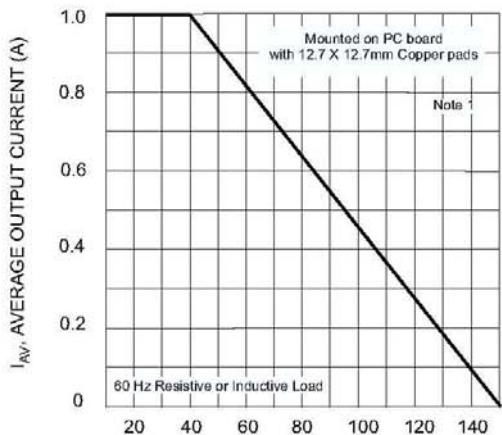
Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

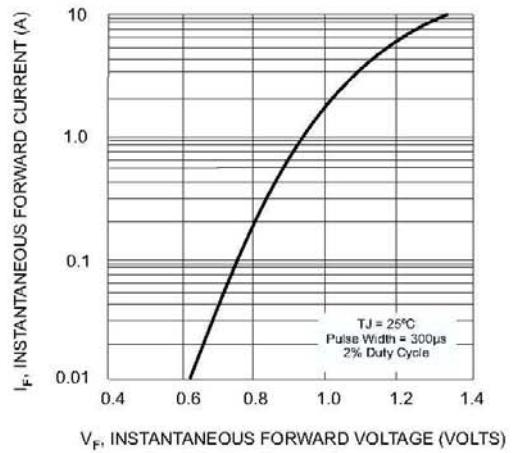
Notes: 1. Thermal resistance from junction to ambient mounted on PC board with 13mm x 13mm copper pads.

2. 60 Hz resistive or inductive load.

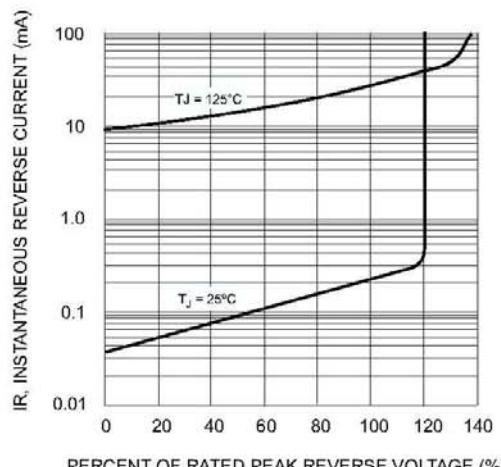
3. For capacitive load, derate current by 20%.



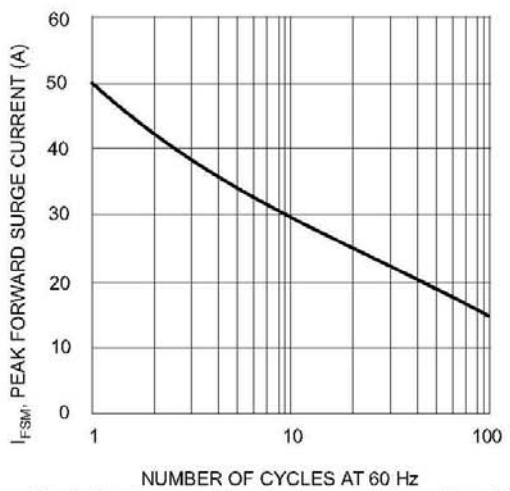
T_A : AMBIENT TEMPERATURE (°C)
Fig. 1 Maximum Output Rectified Current



V_F : INSTANTANEOUS FORWARD VOLTAGE (VOLTS)
Fig. 2 Typical Forward Characteristics



I_R : INSTANTANEOUS REVERSE CURRENT (mA)
PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 3 Typical Reverse Characteristics



I_{FSM} : PEAK FORWARD SURGE CURRENT (A)
NUMBER OF CYCLES AT 60 Hz
Fig. 4 Max Non-Repetitive Peak Forward Surge Current