

1.0A Single-Phase Bridges

FEATURES :

- Good for automation insertion
- Surge overload rating - 30 amperes peak.
- Glass passivated device
- Reliable low cost construction utilizing molded.
- Ideal for printed circuit board.
- RoHS compliant.



MECHANICAL DATA :

- Case : Molded plastic, DB
- Terminals : Plated, solderable per MIL-STD-202E, Method 208C
- Polarity : Marked on body
- Mounting position : Any
- Epoxy : 94V-O rate flame retardan



MAXIMUM RATINGS (Ratings at 25 °C ambient temperature unless otherwise specified)

Characteristic	Symbol	DB101	DB102	DB103	DB104	DB105	DB106	DB107	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge 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 Forward Output Current at $T_A = 40^\circ\text{C}$	I_o	1.0							A
Peak Forward Surge Current , 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Typical Current Squared Time	I^2T	3.74							A^2S
Typical thermal resistance (Note 1)	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	15							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55~+150							$^\circ\text{C}$
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	V_F	1.0							V
Maximum Reverse Current at Rated DC Blocking Voltage per element (@ $T_A=25^\circ\text{C}$ / $T_A=125^\circ\text{C}$)	I_R	5.0 / 50							μA

Note1 : Thermal Resistance: PCB mounted.

TYPICAL RATINGS AND CHARACTERISTICS CURVES

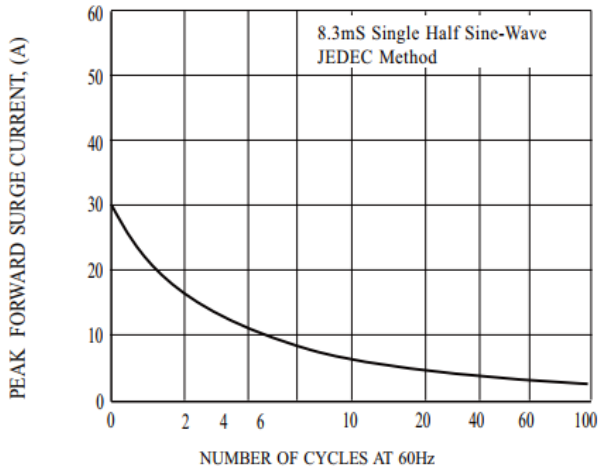


Figure 1. MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

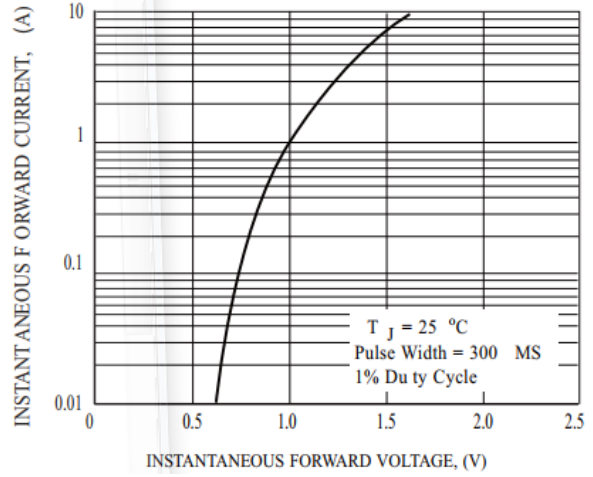


Figure 2. MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

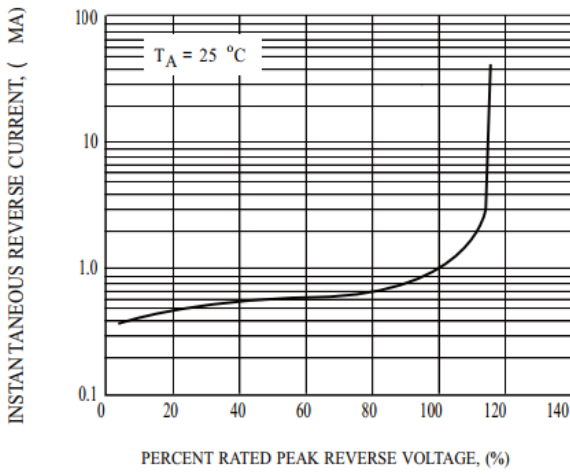


Figure 3. REVERSE CHARACTERISTICS

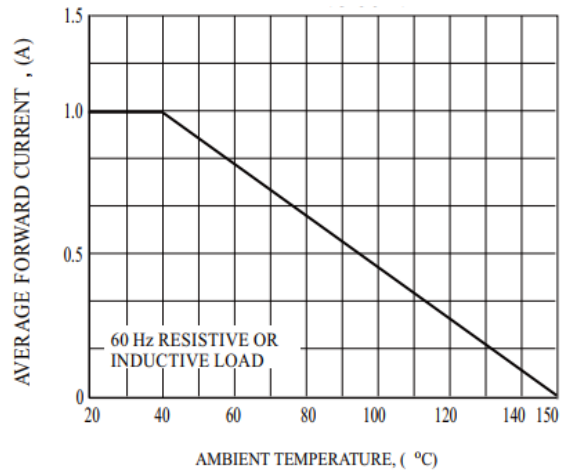
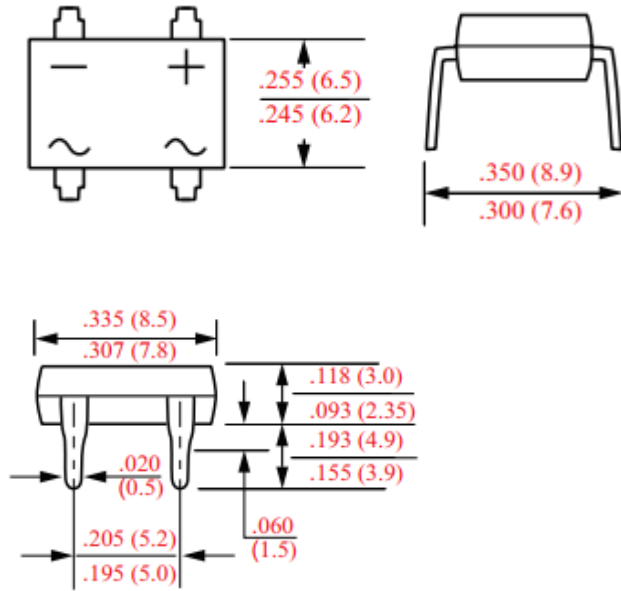


Figure 4. TYPICAL FORWARD CURRENT DERATING CURVE

- Package outlines : Dimensions in inches and (millimeters)



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