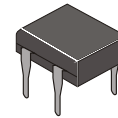


VOLTAGE RANGE: 50 - 1000V
CURRENT: 1.0 A



Features

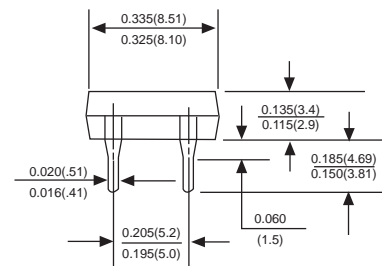
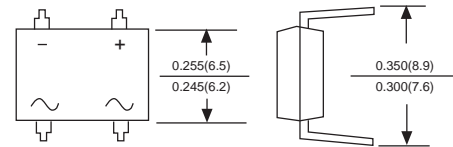
- Ideal for Printed Circuit Board
- Simple, Compact Structure for Trouble-free Performance
- Plastic Package - UL Flammability Classification 94V-0

Mechanical Data

- Terminals: Tin Plated Leads Solderable per MIL-STD-202, Method 208
- Case: Transfer Molded Epoxy
- Mounting Position: Any
- Polarity: Polarity Symbols Marked on Body
- Approx. Weight: 1.0 grams



DB



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	DB101	DB102	DB103	DB104	DB105	DB106	DB107	Unit
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 output rectified current 0.06" (1.5mm) lead length at $T_A=40^\circ\text{C}$ (Note 2)	I_{AV}	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10							A^2s
Maximum instantaneous forward voltage drop per bridge element at 1.0A	V_F	1.1							V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	10							μA
		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-65 to +150							$^\circ\text{C}$
storage temperature range	T_{STG}	-65 to +150							$^\circ\text{C}$

NOTES:

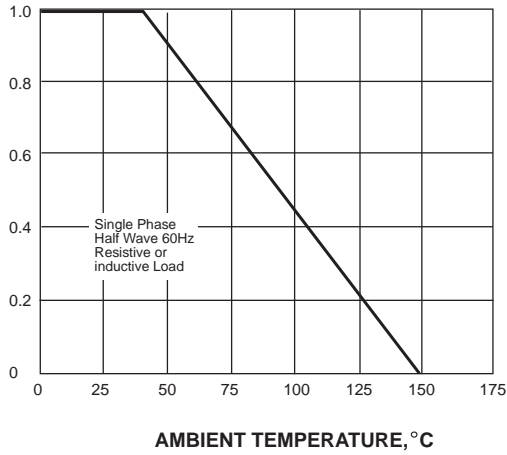
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P.C. board with 0.51" x 0.51" (13x13mm) copper pads.



RATINGS AND CHARACTERISTIC CURVES DB101 THRU DB107

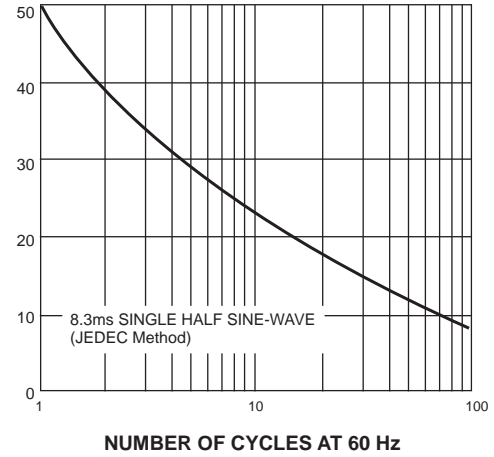
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



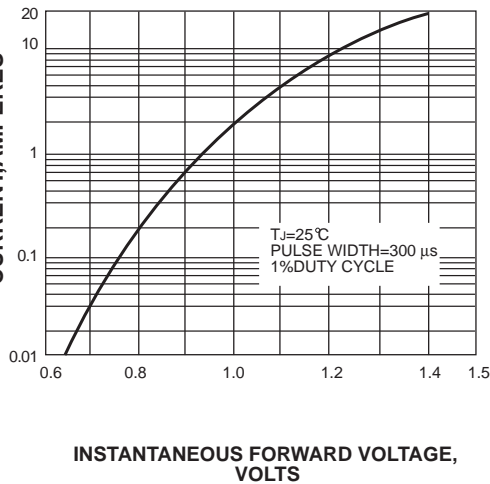
PEAK FORWARD SURGE CURRENT, AMPERES

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



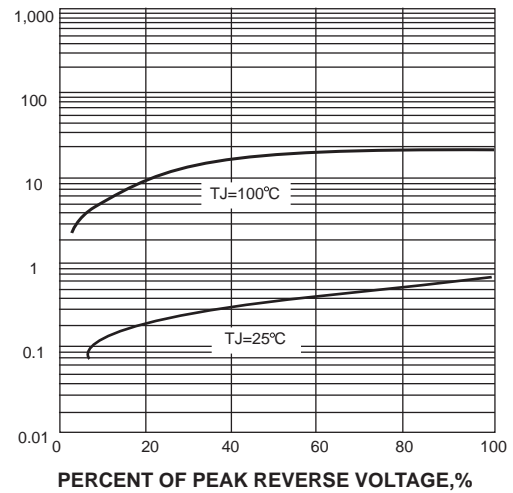
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



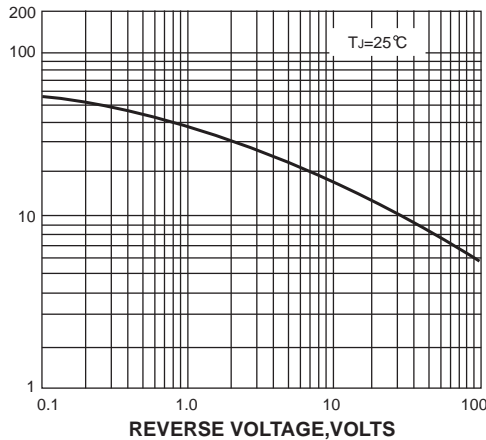
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

