DB101 THRU DB107

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER



REVERSE VOLTAGE: 50 to 1000 VOLTS FORWARD CURRENT: 1.0 AMPERE

FEATURES

· Glass passivated chip junction

· Low forward voltage drop

· High surge overload rating of 50 Amperes peak

· Ideal for printed circuit board

 $\cdot \ High \ temperature \ soldering \ guaranteed:$

260°C for 10 seconds

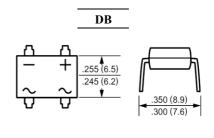
MECHANICAL DATA

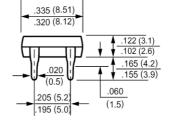
Case: Molded plastic, DB

Epoxy: UL 94V-O rate flame retardant

Terminals: Leads solderable per MIL-STD-202,

method 208 guaranteed Mounting position: Any Weight: 0.02ounce, 0.4gram





Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25 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 Recurrent 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	ī		<u>, </u>		1.0	<u>, </u>	,		A
Rectified Current at T _A =40	I _(AV)	1.0							Amp
Peak Forward Surge Current,									
8.3ms single half-sine-wave	I_{FSM}	I _{FSM} 50						Amp	
superimposed on rated load (JEDEC method)									
Maximum Forward Voltage	$V_{\rm F}$	1.1							Volts
at 1.0A DC and 25	V F								
Maximum Reverse Current at T _A =25	т	5.0 500							uAmp
at Rated DC Blocking Voltage T _A =125	I_R								
Typical Junction Capacitance (Note 1)	C_{J}	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15							/W
Operating and Storage Temperature Range	T _J , Tstg				-55 to +15	0			

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads



RATINGS AND CHARACTERISTIC CURVES

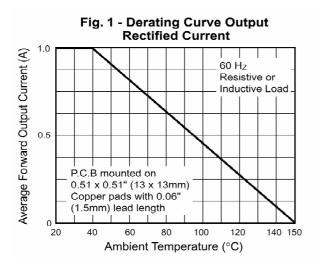


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg Average Forward Output Current (A) TJ = 150°C Single Sine-Wave 50 (JEDEC Method) 40 30 20 1.0 Cycle 10 0 10 100 Number of Cycles at 60 Hz

Fig. 3 - Typical Forward Characteristics Per Leg

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