

WEE Technology Company Limited

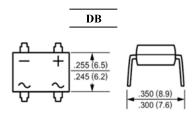
SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

DB151 THRU DB157

VOLTAGE RANGE CURRENT 50 to 1000 Volts 1.5 Ampere

FEATURES

- · Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- · High surge overload rating of 50 Amperes peak
- · Ideal for printed circuit board
- · Glass passivated chip junction



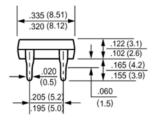
MECHANICAL DATA

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°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	Symbols	DB151	DB152	DB153	DB154	DB155	DB156	DB157	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 Rectified Current at T _A =40°C	I _(AV)	1.5							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 at 1.0A DC and 25℃	$\mathbf{V_F}$	1.1							Volts
Maximum Reverse Current at T _A =25℃	T .	5.0							
at Rated DC Blocking Voltage T _A =125℃	I_R	1 _R 500							uAmp
Typical Junction Capacitance (Note 1)	C _J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							°C/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15							°C/W
Operating and Storage Temperature Range	T _J , Tstg	-55 to +150							$^{\circ}$

NOTES:

- 1- Measured at 1 MH_Z 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



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Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

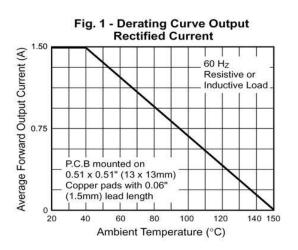


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg Average Forward Output Current (A) TJ = 150°C 50 Single Sine-Wave (JEDEC Method) 40 30 20 1.0 Cycle 10 0 10 100 Number of Cycles at 60 Hz

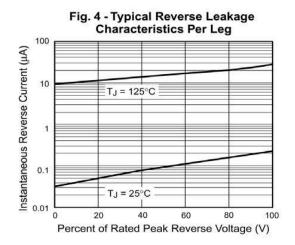
Fig. 3 - Typical Forward Characteristics
Per Leg

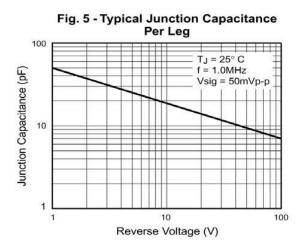
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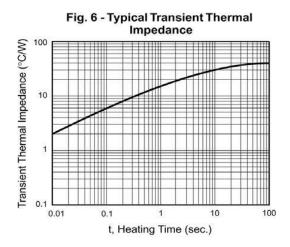
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T_J = 25°C
Pulse width = 300µs
1% Duty Cycle

1,4
Instantaneous Forward Voltage (V)







Note: Specifications are subject to change without notice. For more detail and update, please visit our website.



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