DB151S THRU DB157S

SINGLE-PHASE GLASS PASSIVATED SILICON SURFACE MOUNT BRIDGE RECTIFIER



REVERSE VOLTAGE: FORWARD 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

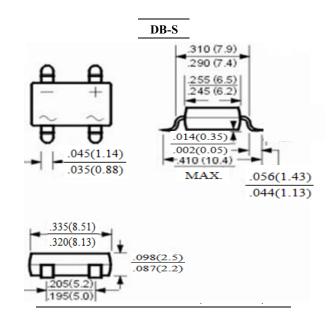
MECHANICAL DATA

Case: Molded plastic, DB-S

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



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	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	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℃ (Note 2)	I _(AV)	1.5							Amp
Peak Forward Surge Current,									
8.3ms single half-sine-wave	I_{FSM} 50							Amp	
superimposed on rated load (JEDEC method)									
Maximum Forward Voltage	$\mathbf{V_F}$	1.1							Volts
at 1.5A DC and 25℃									
Maximum Reverse Current at T _A =25℃	I_R	5.0							uAmp
at Rated DC Blocking Voltage T _A =125°C	1 _R	500							
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							င

NOTES:

- 1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.
- 2- Units mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads



RATINGS AND CHARACTERISTIC CURVES

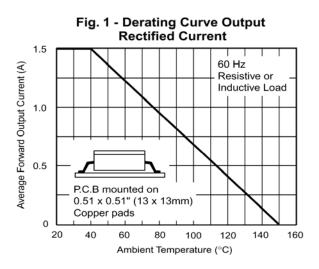


Fig. 2 - Maximum Non-Repetitive Peak
Forward Surge Current Per Leg

60

TJ = 150°C
Single Sine-Wave
(JEDEC Method)

10
Number of Cycles at 60 Hz

Fig. 3 - Typical Forward Characteristics Per Leg 10 Instantaneous Forward Current (A) 1 0.1 T_J = 25°C Pulse width = 300μs 1% Duty Cycle 0.01 0.4 0.6 8.0 1.0 1.2 1.4 Instantaneous Forward Voltage (V)

