Kingtronics®

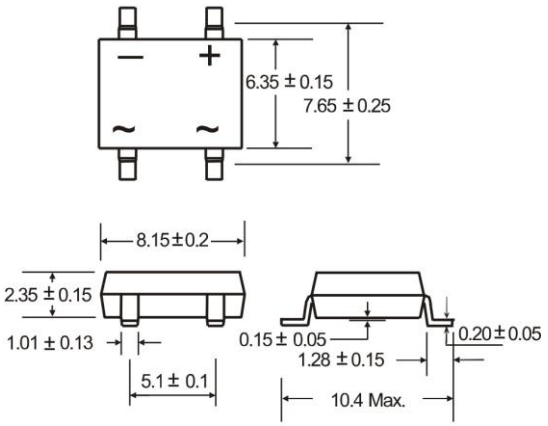
DB151S THRU DB157S

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.5 Ampere

FEATURES

Glass passivated chip junction.
High surge overload rating of 50 Amperes peak.
Ideal for printed circuit board.
High temperature soldering guaranteed: 260°C for 10 seconds.

DB-S



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℃ ambient temperature unless otherwise specified , Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load derate current by 20%

Dimensions in millimeters (1mm=0.0394")

PARAMETER	SYMBOL	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	UNIT
Maximum Recurrent 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}	100	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_A=40℃ (Note 2)	$I_{(AV)}$	1.5							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							A
Maximum forward Voltage at 1.5A DC and 25℃	V_F	1.1							V
Maximum DC Reverse Current at T_A=25℃ at Rated DC Blocking voltage T_A=125℃	I_R	5.0 500							uA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	40							℃/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15							℃/W
Operating and Storage Temperature Range	T_J , T_{STG}	-55 to +150							℃

1- Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2- Units mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads.

Kingtronics® International Company

Website: www.kingtronics.com Email: info@kingtronics.com Tel: (852) 8106 7033 Fax: (852) 8106 7099

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RATINGS AND CHARACTERISTIC CURVES

Fig. 1 - Derating Curve Output Rectified Current

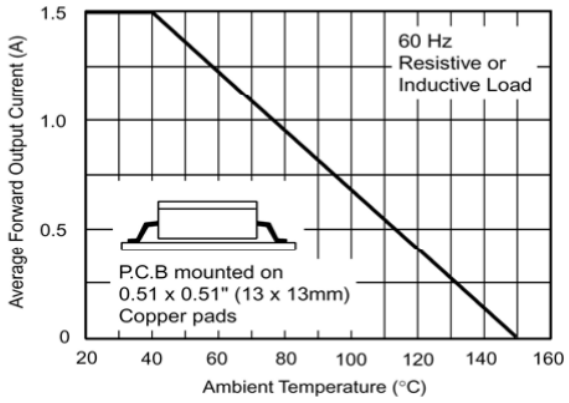


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

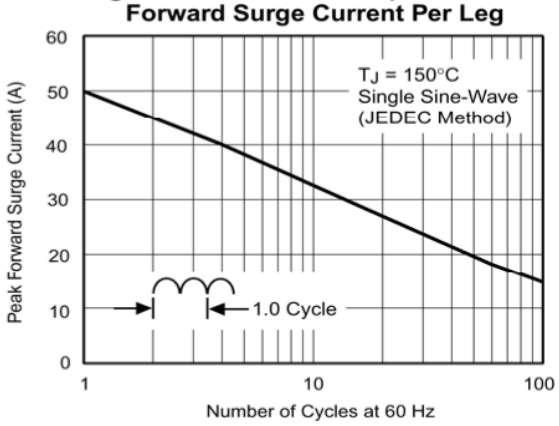


Fig. 3 - Typical Forward Characteristics Per Leg

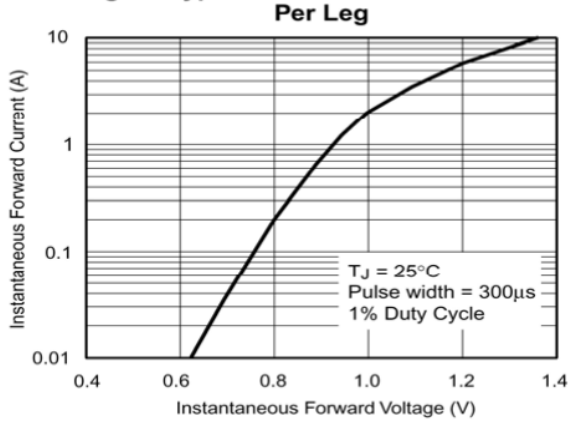


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

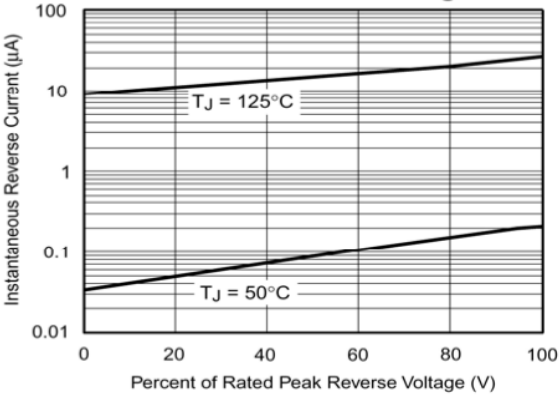


Fig. 5 - Typical Junction Capacitance Per Leg

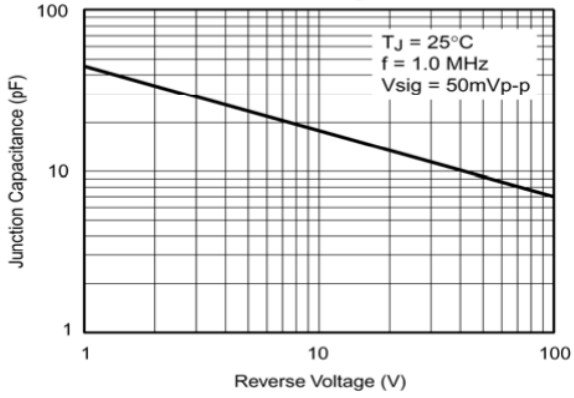
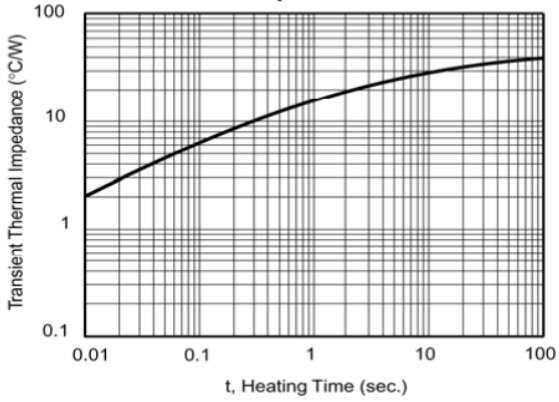


Fig. 6 - Typical Transient Thermal Impedance



Note: Specifications are subject to change without notice.