FEATURES

- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 50 amperes
- Ideal for printed circuit board application

DB-S

MECHANICAL DATA

- Case: Molded Plastic
- Polarity: Marked On Body
- Mounting Position: Any

APPROVALS

RoHS	Compliance with 2011/65/EU

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

Parameter		Symbol	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	Unit
Marking			DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum Rms Bridge Input Voltage		V_{RMS}	35	70	140	280	420	560	700	
Maximum Dc Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Output Current at T_A=40°C		$I_{F(AV)}$	1.5							A
Peak Forward Surge Current Single Sine-wave Superimposed On Rated Load (Jedec Method)		I_{FSM}	50							
Maximum Instantaneous Forward Voltage Drop Per Leg at 1.5A		V_F	1.0							V
Maximum Dc Reverse Current At Rated DC Blocking Voltage Per Element	T_A=25°C	I_R	10							μA
	T_A=125°C		500							
Typical Thermal Resistance Per Element (1)		$R_{\theta JA}$	45							°C/W
Rating For Fusing (T<8.3ms)		I^2t	10							A^2sec
Typical Junction Capacitance Per Element (2)		C_J	25.0							pF
Operating Junction And Storage Temperature Range		T_J,T_{STG}	-55 to +150							°C

Notes: (1)Thermal Resistance From Junction To Ambemt On P.C.Board Mounting.
(2)Measured At 2.0MHz And Applied Reverse Voltage Of 4.0 Volts.

CHARACTERISTIC CURVES

Fig. 1- Derating Curve for Output Rectified Current

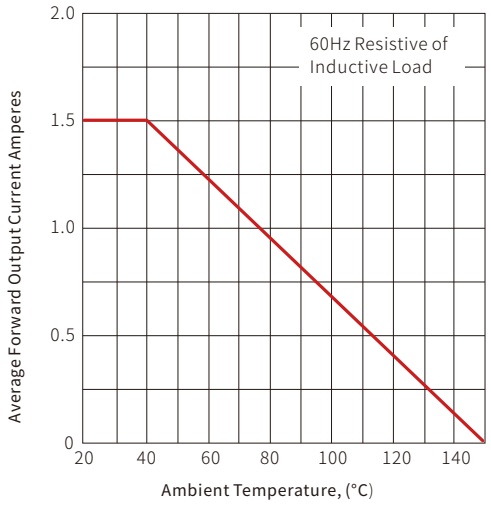


Fig. 2-Maximum Non-repetitive Peak Forward Surge Current

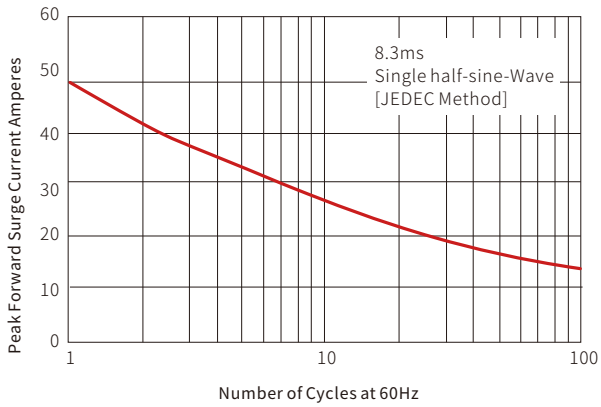


Fig. 3-Typical Instantaneous Forward Characteristics

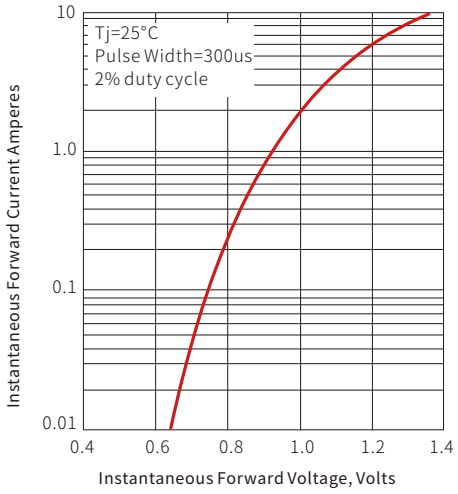


Fig. 4-Typical Revers Characteristics

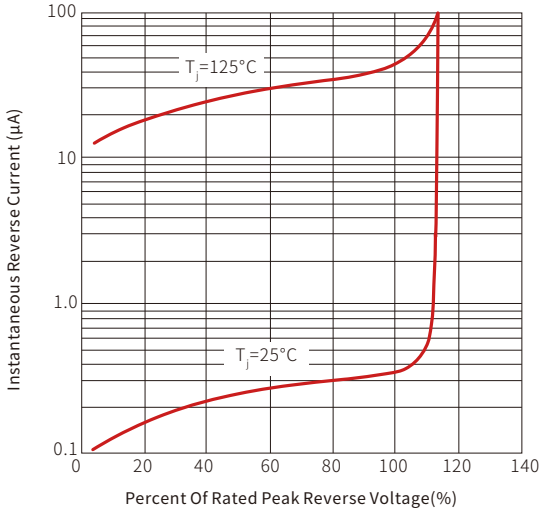
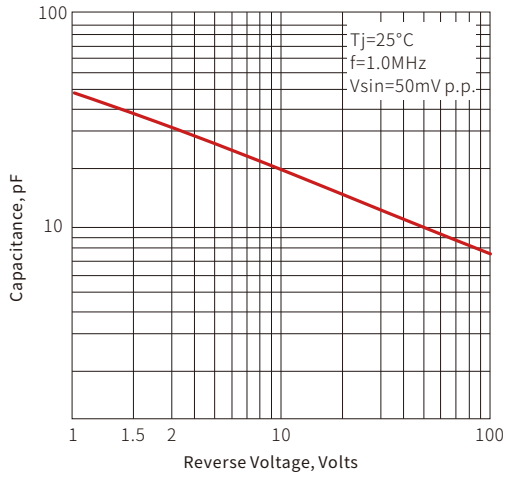
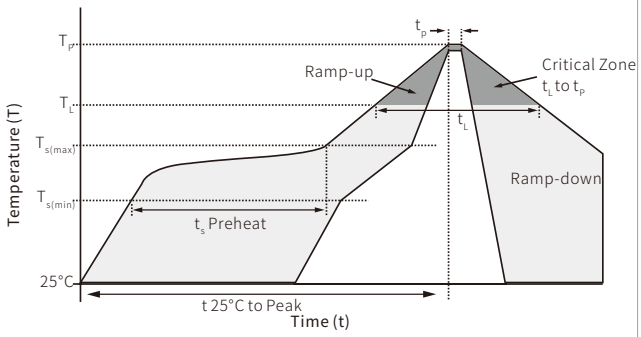


Fig. 5-Typical Junction Capacitance

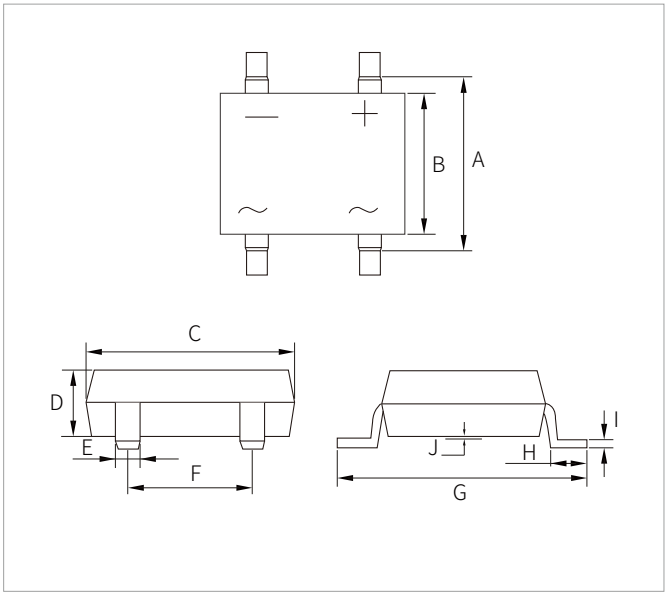


SOLDERING PARAMETERS

Reflow Condition		Lead–free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3°C/second max
	$T_{S(max)}$ to T_L - Ramp-up Rate	3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_P)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes max.
Do not exceed		260°C



DB-S PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	7.40	7.90	0.291	0.311
B	6.20	6.50	0.244	0.256
C	7.95	8.35	0.313	0.329
D	2.20	2.50	0.087	0.098
E	0.88	1.14	0.035	0.045
F	5.00	5.20	0.197	0.205
G	10.4Max.		0.409Max.	
H	1.13	1.43	0.044	0.056
I	0.15	0.25	0.006	0.010
J	0.02	0.18	0	0.007

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
DB151S-DB157S	DB-S	1500PCS	13”

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