

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
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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						A		
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	I _R	T _A =25°C						10		μA
		T _A =125°C						500		
Typical Thermal Resistance Per Element (1)	R _{θJA}	45						°C/W		
Rating For Fusing (T<8.3ms)	I ² t	10						A ² sec		
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 Ambient 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

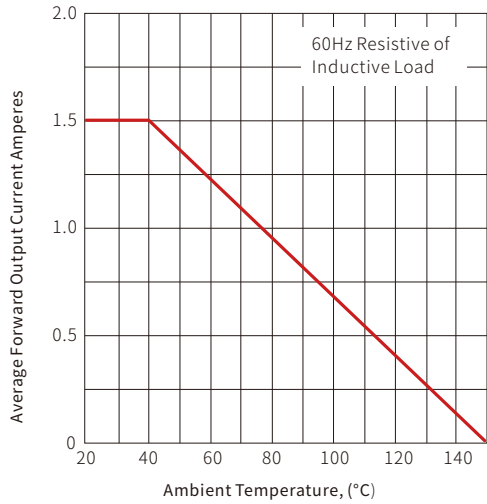


Fig. 2- Maximum Non-repetitive Peak Forward Surge Current

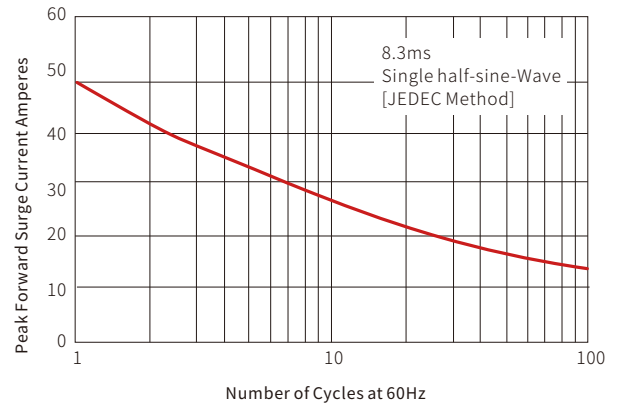


Fig. 3- Typical Instantaneous Forward Characteristics

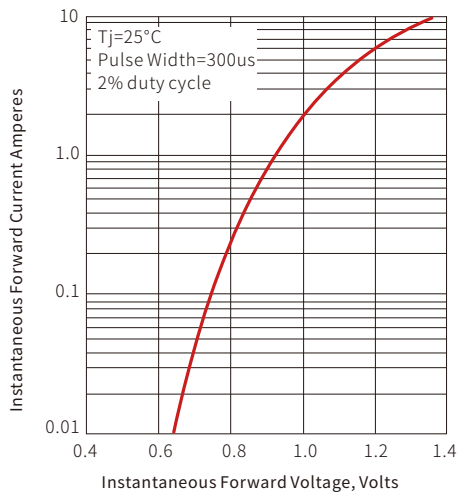


Fig. 4- Typical Revers Characteristics

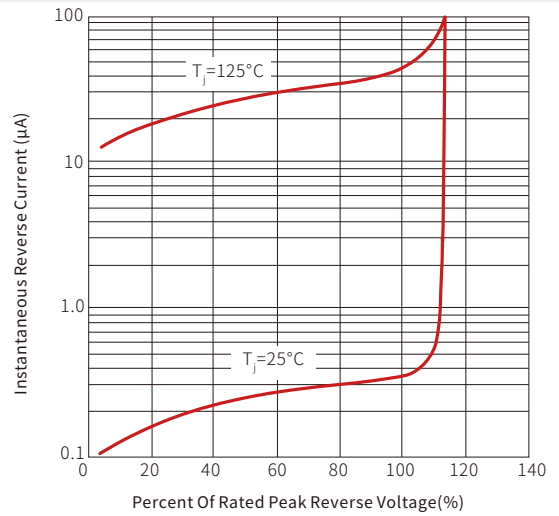
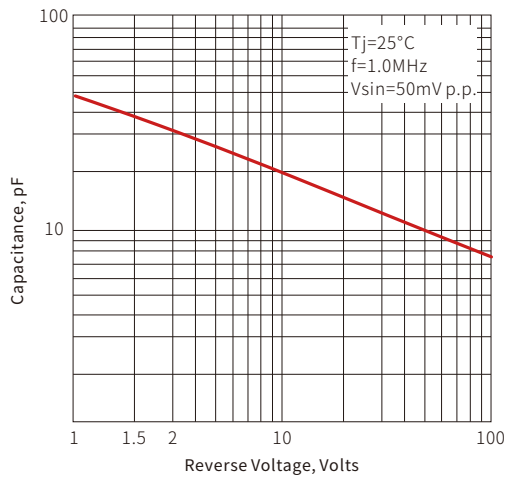
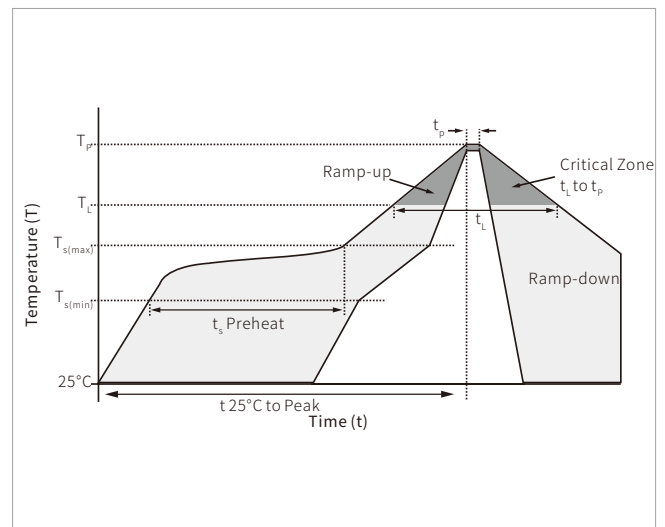


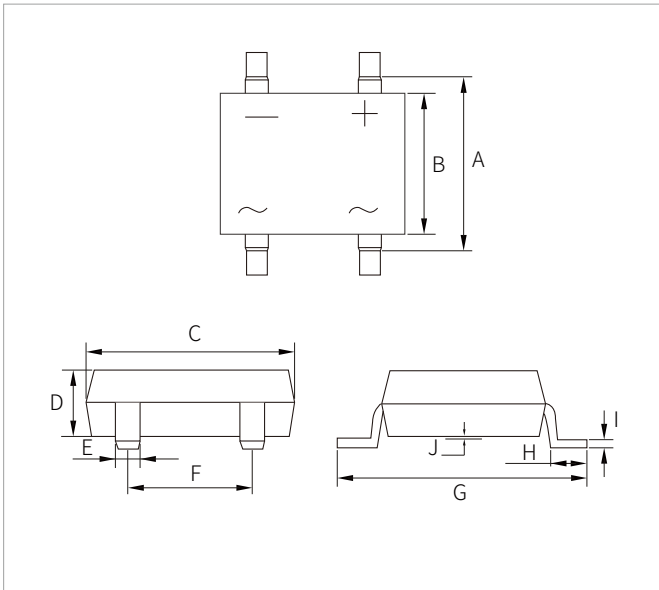
Fig. 5-Typical Junction Capacitance


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(\text{min})}$)	150°C
	Temperature Max ($T_{s(\text{max})}$)	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
$T_{s(\text{max})}$ 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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