MB1S~MB10S

ROHS

Surface Mount Glass Passivated Bridge Rectifier

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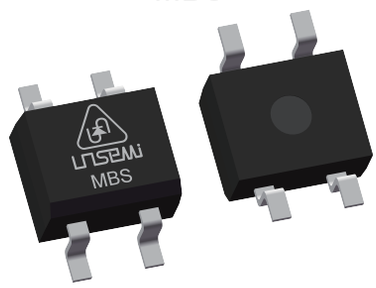
Features

- ◆ High Surge Current Capability
- ◆ Glass Passivated Chip Junction
- ◆ Designed for Surface Mount Application

Mechanical Data

- ◆ Case: MBS
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Approx. Weight : 100mg /0.0035oz
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026

MBS



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 current derate by 20%.

Parameter		Symbol	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Tc=125℃		$I_{F(AV)}$	0.8						A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load		I_{FSM}	30						A
Maximum Forward Voltage	at 0.4A	V_F	1.0						V
	at 0.8A	V_F	1.1						
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta=25℃	I_R	5.0						μA
	Ta=125℃	I_R	40						
Typical Junction Capacitance (1)		Cj	13						pF
Typical Thermal Resistance (2)		$R_{\theta JA}$	90						℃/W
		$R_{\theta JC}$	32						
Operating and Storage Temperature Range		T_J,Tstg	-55 ~ +150						℃

Note: (1) Measured at 1MHz and applied reverse voltage of 4 VDC.

(2) Mounted on glass epoxy PC board with 4×1.5"×1.5"（3.81×3.81cm）copper pad.

Electrical Characteristics Curves

Fig.1 Forward Current Derating Curve

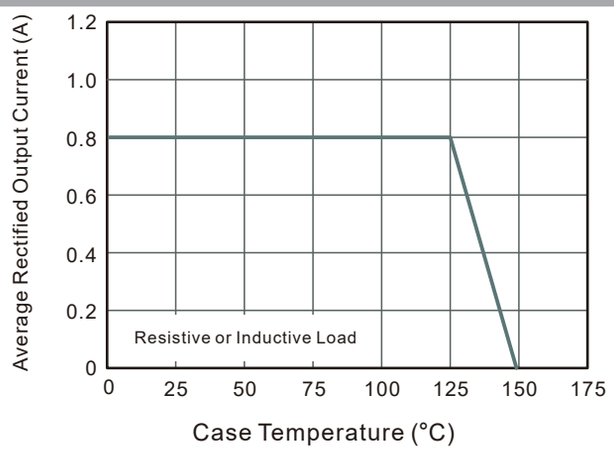


Fig. 2 Typical Reverse Characteristics

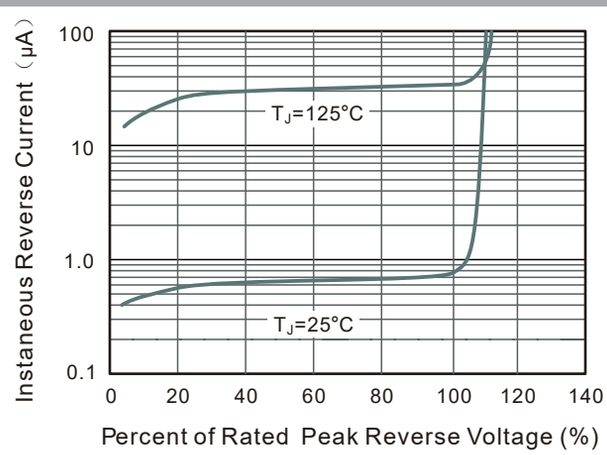


Fig.3 Typical Instaneous Forward Characteristics

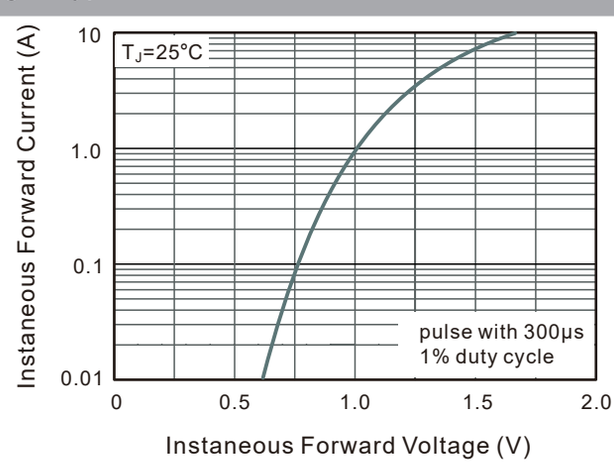


Fig. 4 Typical Junction Capacitance

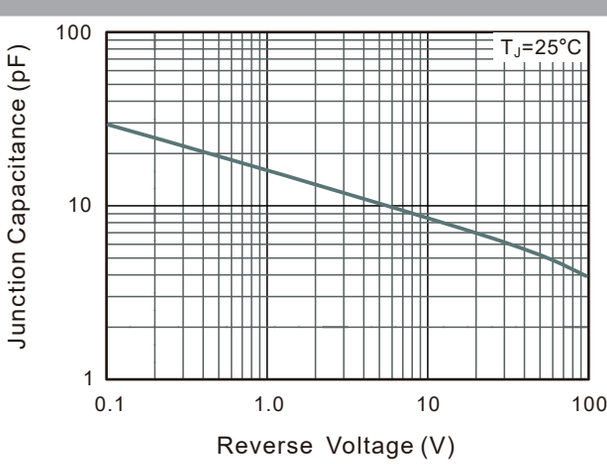
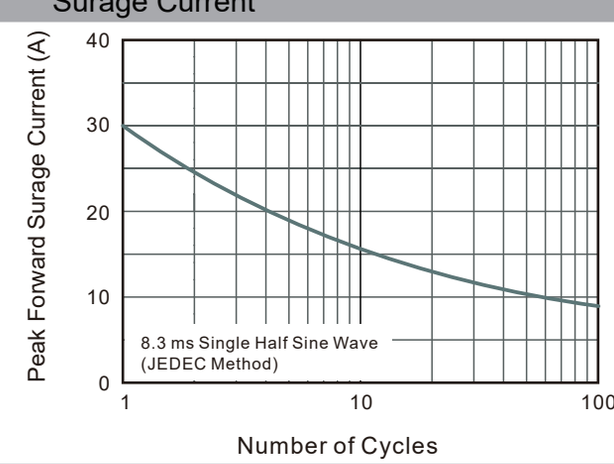
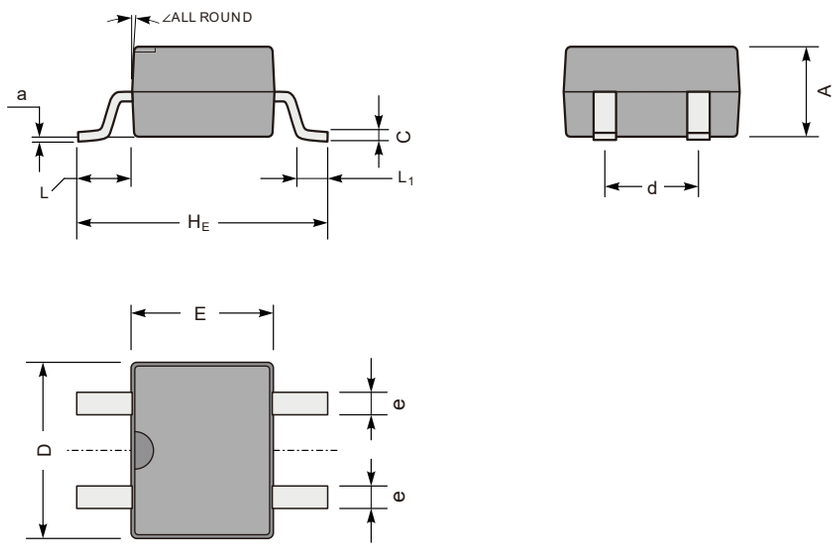


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



Package Outline & Dimensions



UNIT		A	C	D	E	H_E	d	e	L	L_1	a	∠
mm	max	2.6	0.22	5.0	4.1	7.0	2.7	0.7	1.7	1.1	0.2	7°
	min	2.2	0.15	4.5	3.6	6.4	2.3	0.5	1.3	0.5	—	
mil	max	102	8.7	197	161	276	106	28	67	43	8	
	min	94	5.9	177	142	252	91	20	51	20	—	

Marking

Type Number	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S
Making	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S

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ROHS

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