

Surface Mount Glass Passivated Bridge Rectifiers

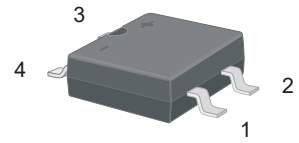
Features

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- High Surge Current Capability
- Designed for Surface Mount Application

Marking Code:

MB1S-12: 12S1
 MB2S-12: 12S2
 MB4S-12: 12S4
 MB6S-12: 12S6
 MB8S-12: 12S8
 MB10S-12: 12S10

MBS



1.Input Pin(~) 2.Input Pin(~)
 3.Output Anode(+) 4.Output Cathode (-)

Maximum Ratings and Electrical Characteristics

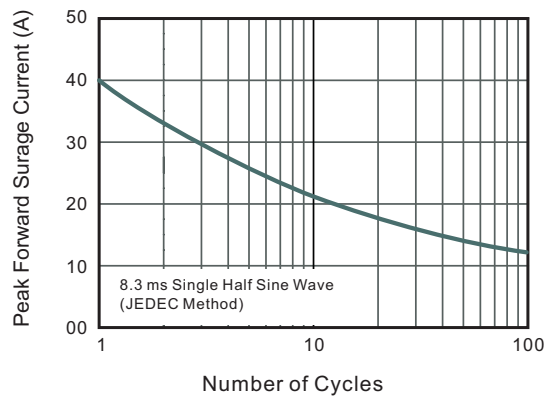
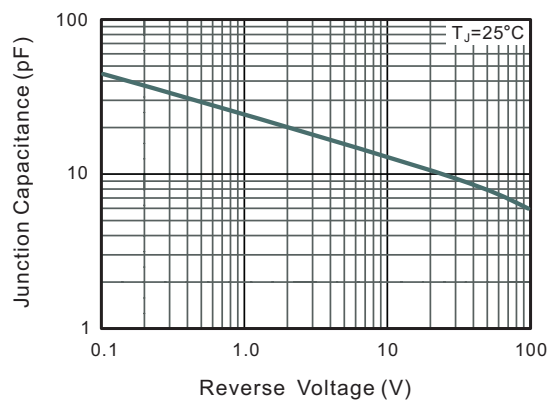
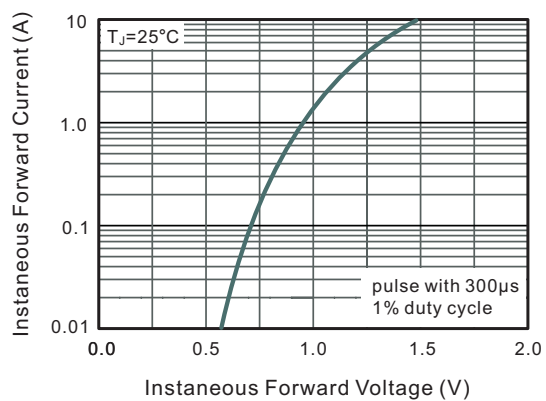
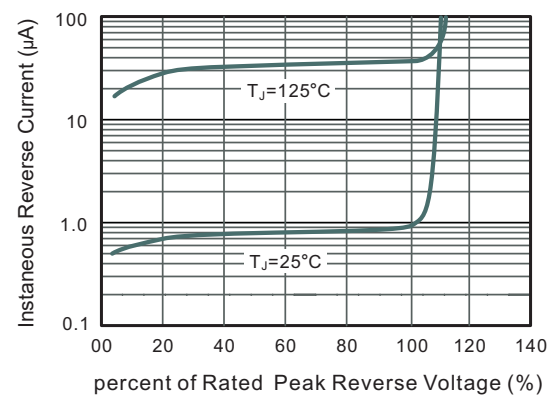
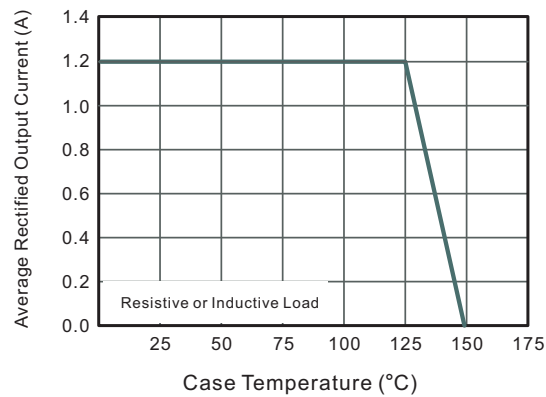
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	MB1S-12	MB2S-12	MB4S-12	MB6S-12	MB8S-12	MB10S-12	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 Rectified Output Current at $T_C = 125^\circ\text{C}$	I_O	1.2						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	40						A
Maximum Instantaneous Forward Voltage at 1.2 A	V_F	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	I_R	5 80						μA
Typical Junction Capacitance ^{Note1}	C_j	18						pF
Typical Thermal Resistance ^{Note2}	$R_{\theta JA}$ $R_{\theta JC}$	75 25						$^\circ\text{C/W}$
Junction Temperature	T_J	150						$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150						$^\circ\text{C}$

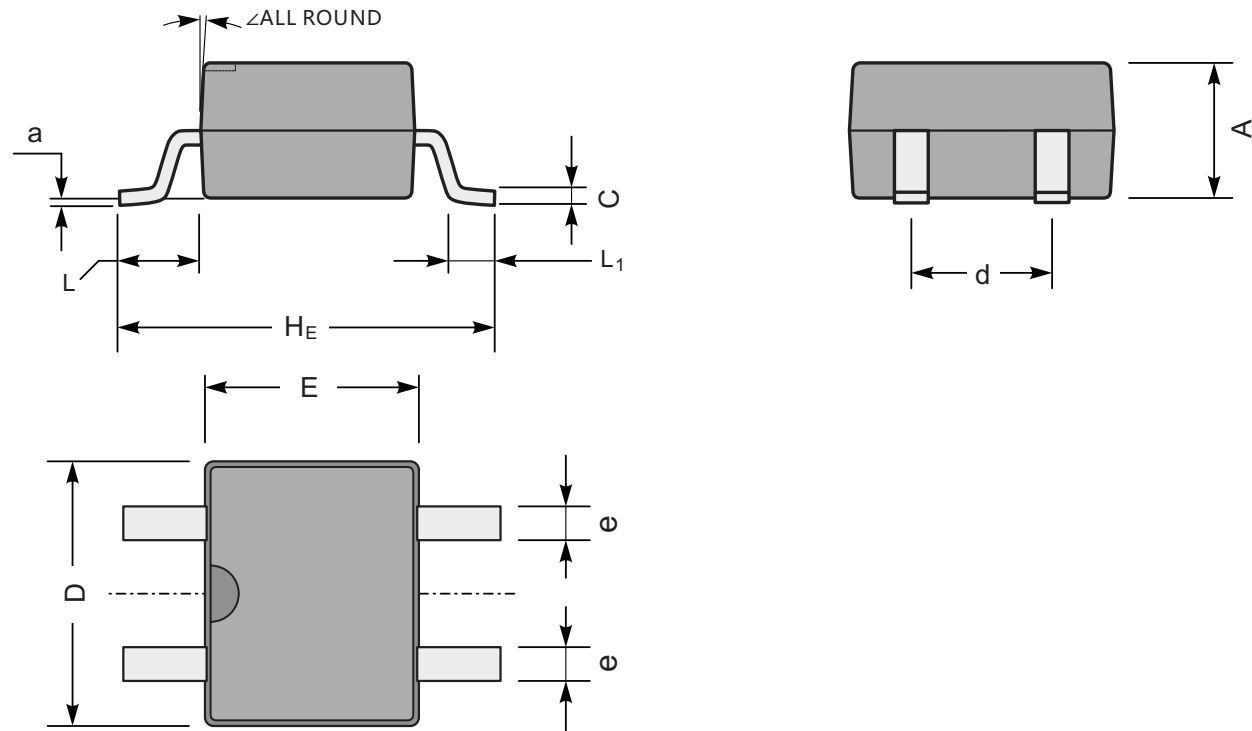
Note:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

Typical Characteristic Curves



Package Outline (MBS Dimensions in mm)




MBS mechanical data

UNIT		A	C	D	E	HE	d	e	L	L1	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	—	

Contact Information

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For additional information, please contact your local Sales Representative.

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