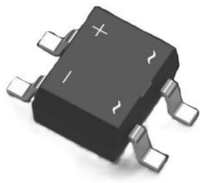
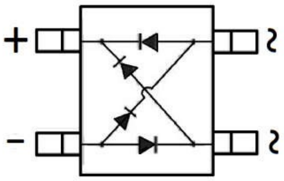
0.8A Glass Passivated Bridge Rectifier

Features

- Glass Passivated Chip Junction
- Low Reverse Voltage Leakage Current
- High Surge Current Capability
- Low Forward Voltage Drop
- Reverse Voltage : 50 to 1000V
- Forward Current : 0.8A
- High temperature soldering : 260°C/10s at terminals



MBS



Applications

- Switching power supply

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		Symbol	MB 05S	MB 1S	MB 2S	MB 4S	MB 6S	MB 8S	MB 10S	Unit
Maximum Repetitive 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}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_A=40℃		$I_{F(AV)}$	0.8							A
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)		I_{FSM}	30							A
Maximum Instantaneous Forward Voltage	I_F=0.4A	V_F	1.0							V
	I_F=0.8A		1.1							
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	5.0							μA
	T_A=125℃		40							
Typical Junction Capacitance (Note 1)		C_J	13							pF
Typical Thermal Resistance (Note 2)		$R_{θJA}$	90							°C/ W
Operating Junction and Storage Temperature Range		T_J, T_{STG}	(-55 to+150)							°C

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance test performed in accordance with JESD-51.Unit mounted on 15mm*12mm*1.6mm AL pad attach 195mm*110mm*10mm steel plate.

Ratings and Characteristic Curves (T$_A$=25℃ unless otherwise noted)

Fig.1 Average Rectified Output Current Derating Curve

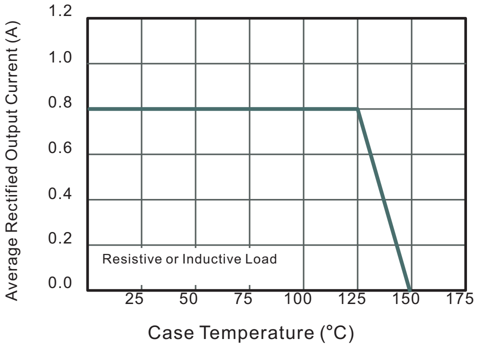


Fig.2 Typical Reverse Characteristics

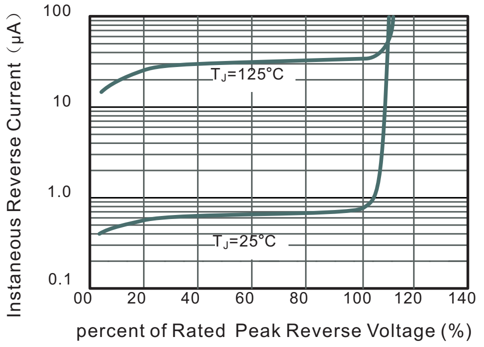


Fig.3 Typical Instaneous Forward Characteristics

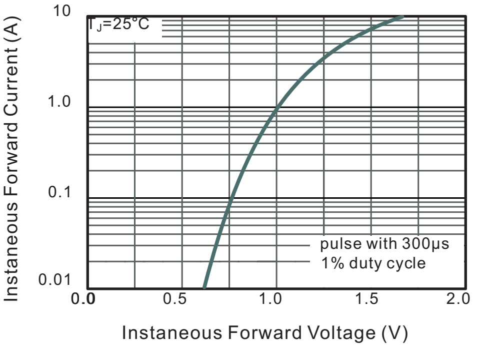


Fig.4 Typical Junction Capacitance

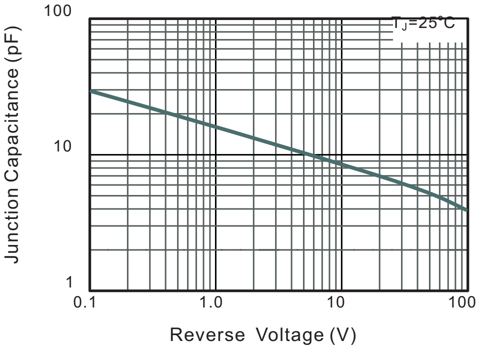
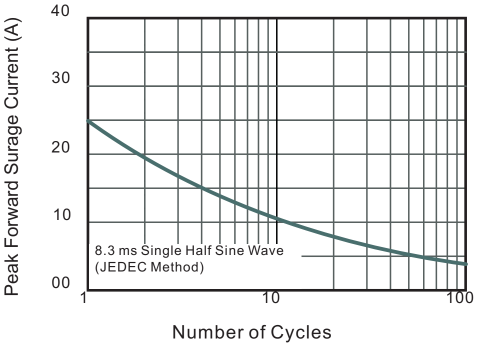
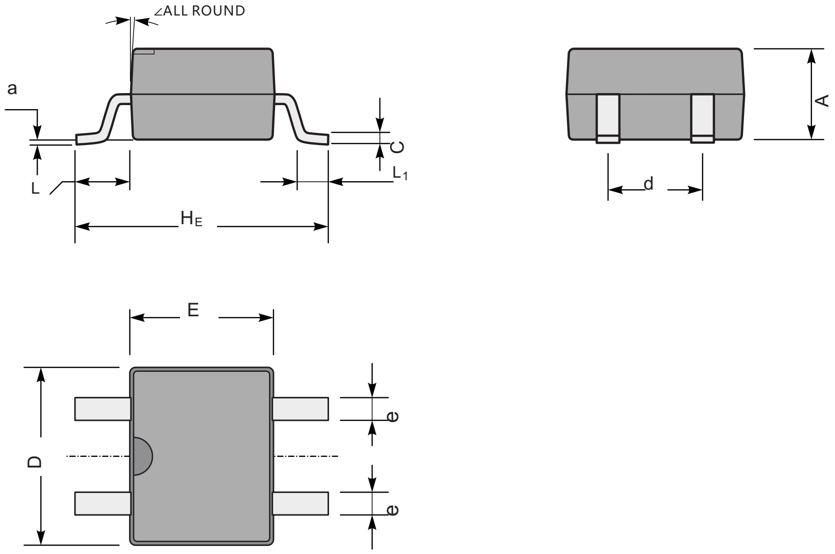


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



Package Outlines (Dimensions in mm)

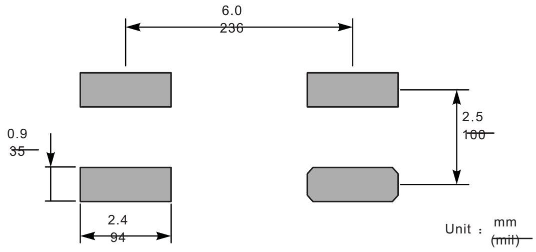
Plastic surface mounted package(MB-S)



MBS mechanical data

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	—	

The recommended mounting pad size



Marking

Type number	Marking code
MB1S	MB1S
MB2S	MB2S
MB4S	MB4S
MB6S	MB6S
MB8S	MB8S
MB10S	MB10S

***Important Usage Information and Disclaimer**

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