炬芯微 XUANXINWEI

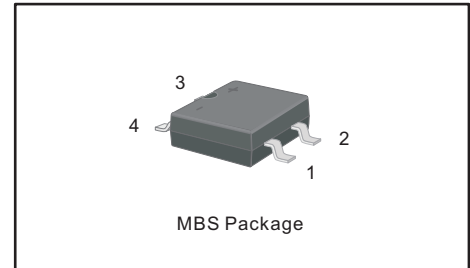## 0.8A /1.0ASURFACE MOUNT GLASS PASSIVATED BRIDGE

RECTIFIER FEATURES:

Glass Passivated Chip Junction

Reverse Voltage - 100 to 1000 V

Forward Current - 0.8 A/1.0A

High Surge Current Capability

Designed for Surface Mount Application

MECHANICAL DATA

• Case: MBS

• Terminals: Solderable per MIL-STD-750, Method 2026

• Approx. Weight: 100mg /0.0035oz

PINNING

| PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)

MBS Package

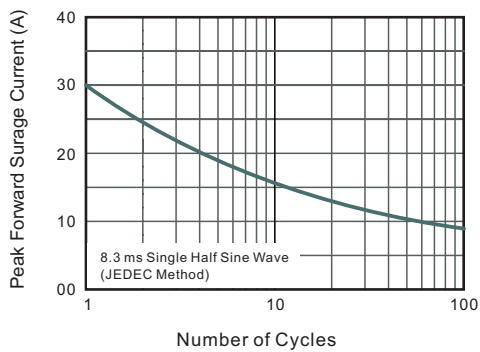### Maximum Ratings and Electrical characteristics
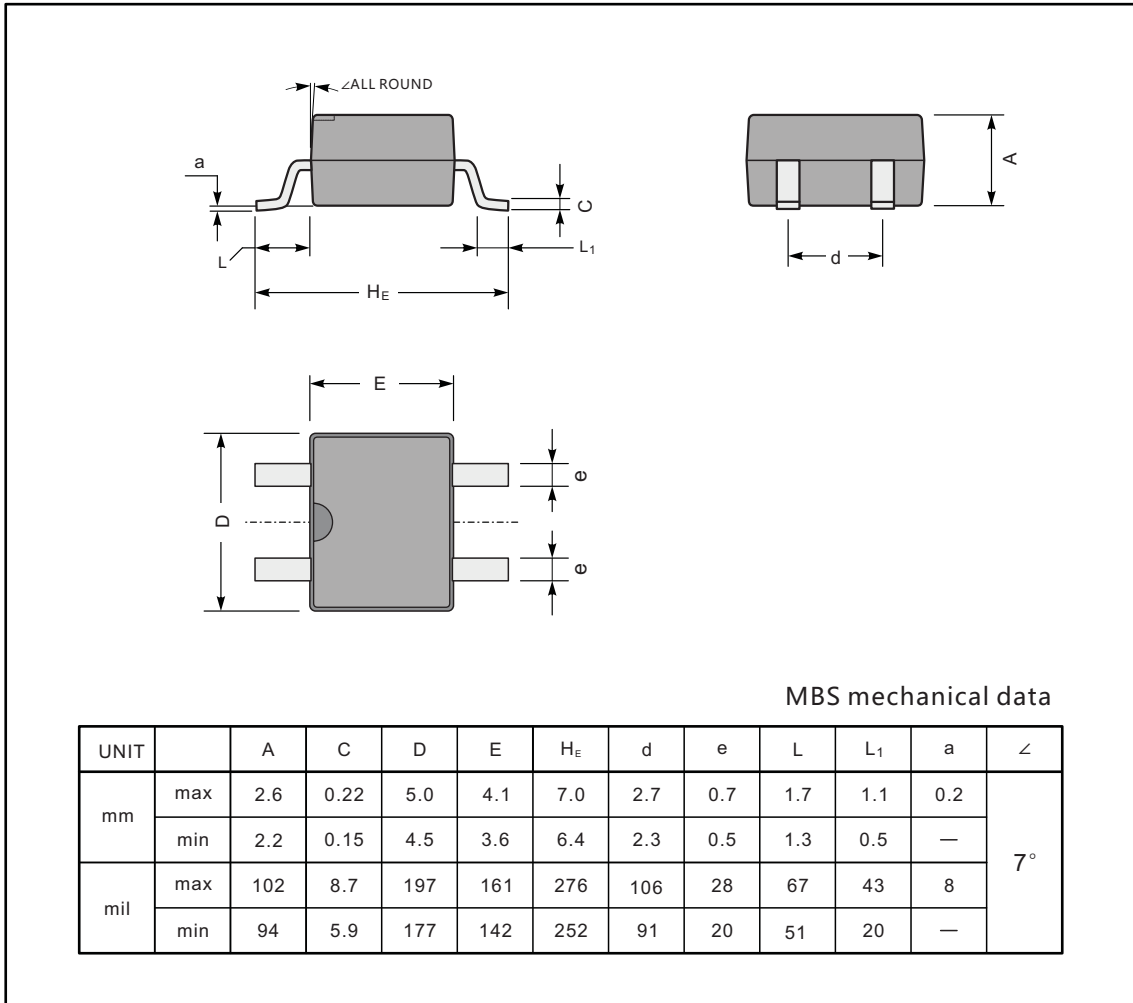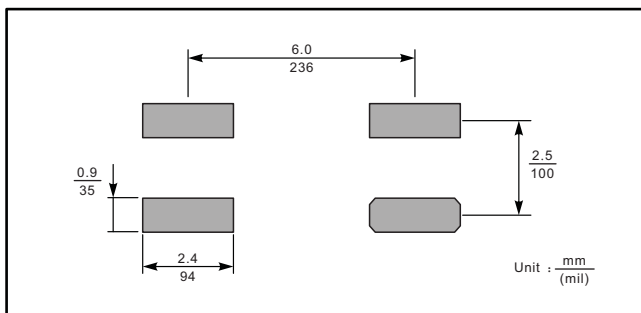
Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	MB1S	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
Average Rectified Output Current at T_c = 125 °C	I_O	0.8/1.0A						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30						A
Maximum Forward Voltage at 0.4 A at 0.8 A/1.0A	V_F	1.0 1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T_A=25 °C @T_A=125 °C	I_R	5 40						μA
Typical Junction Capacitance (Note1)	C_j	13						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$	90 32						°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						°C

Note: 1. Measured at 1MHz 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.

Fig.1 Average Rectified Output Current Derating Curve
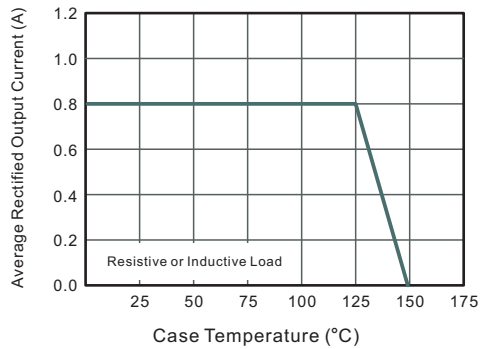
Fig.2 Typical Reverse Characteristics
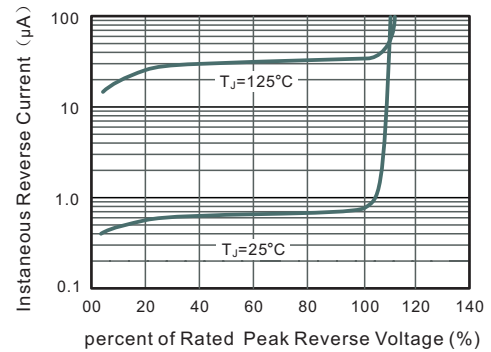
Fig.3 Typical Instaneous Forward Characteristics
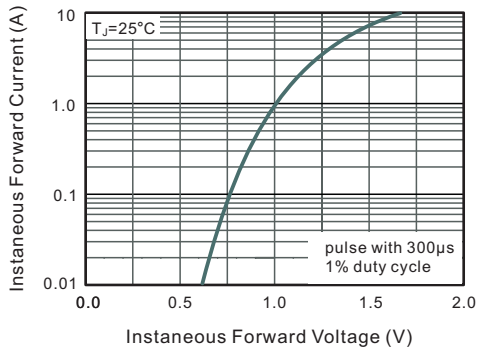
Fig.4 Typical Junction Capacitance
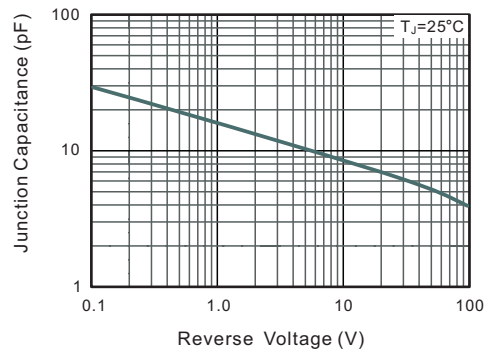
Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

MBS

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