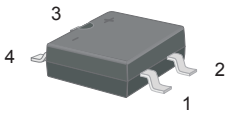
MB10S

23-NOV-2017

BRIDGE RECTIFIER



MBS Package

Features

- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 1.0 A
- High Surge Current Capability
- Designed For Surface Mount Application

PINNING

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

Benefits

- Case: MBS
- Terminals: Solderable Per MIL-STD-750
- Approx. Weight: 0.461g / 0.0163oz

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	MB10S	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current	I_o	1.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30	A
I^2t rating for fusing (1ms< t < 10ms)	I^2t	60	A^2S
Maximum Forward Voltage at 0.4 A	V_F	1.0	V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	I_R	5 40	μA
Typical Junction Capacitance（Note1）	Cj	13	pF
Operating and Storage Temperature Range	Tj, Tstg	-55 ~ +150	°C
Typical thermal resistance (Note 2)	RthJA RthJC	90 32	°C/W

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"（3.81×3.81 cm）copper pad

RATINGS AND CHARACTERISTICS CURVES (TA = 25 ˚C unless otherwise noted)

Fig.1 Average Rectified Output Current Derating Curve

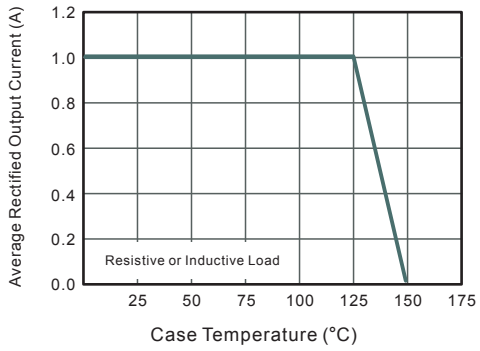


Fig.2 Typical Reverse Characteristics

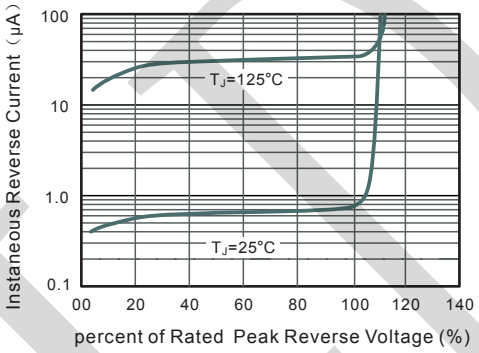


Fig.3 Typical Instaneous Forward Characteristics

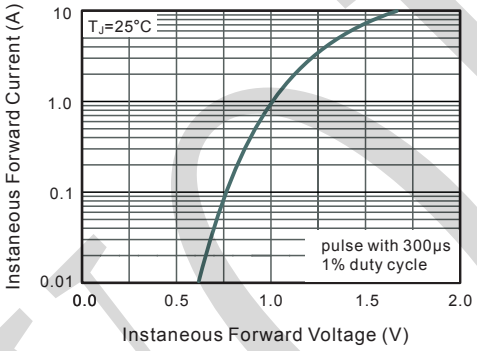


Fig.4 Typical Junction Capacitance

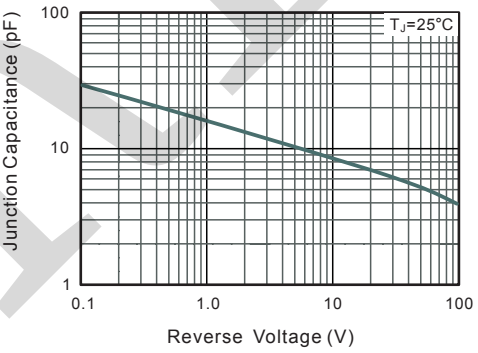
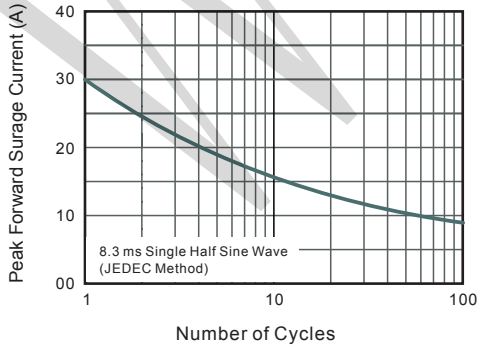
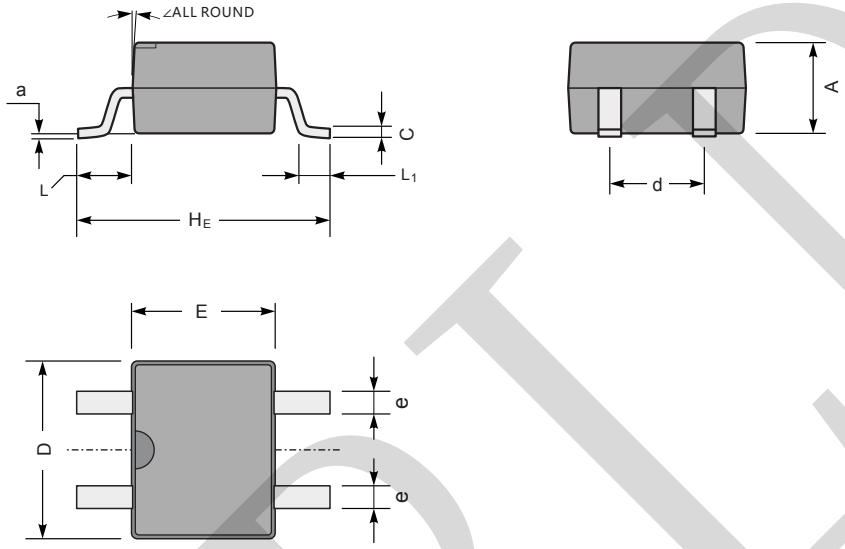


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



PACKAGE OUTLINE DIMENSIONS

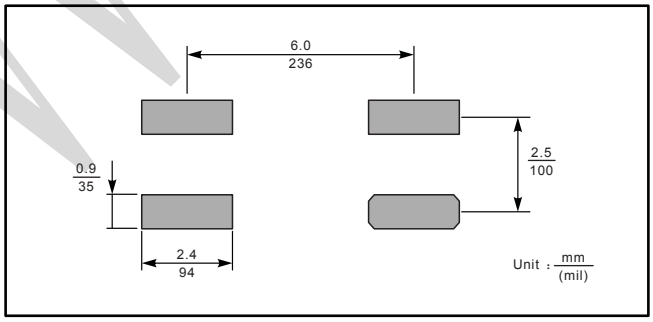
MBS



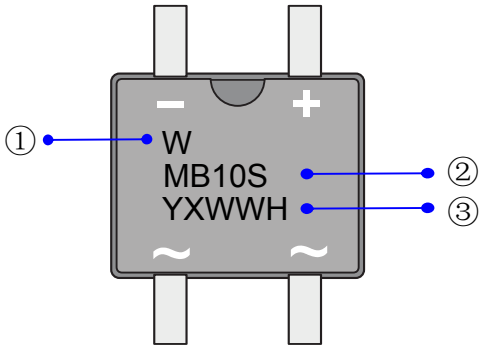
MBS mechanical data

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	—	

MBS Suggested Pad Layout



Marking Information



①W : Company's trademark
②Product model : MB10S
③PDC information：