

Descriptions

0A Surface Mount Glass Passivated Bridge Rectifier, MBS package.

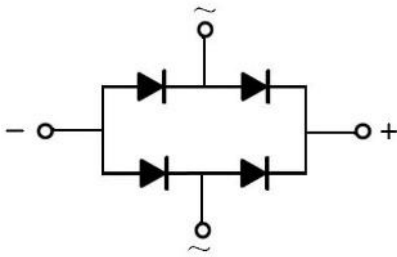
Features

- Glass Passivated Chip Junction
- Reverse Voltage:100to1000V
- Forward Current:1.0A
- High Surge Current Capability
- Designed for Surface Mount
- Application.Halogen free product

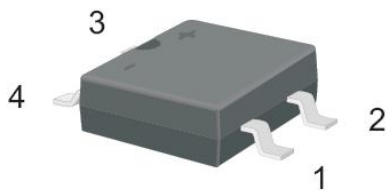
Applications

General purpose

Equivalent Circuit



Pinning



PIN1: DC+ PIN2: AC PIN 3: AC PIN 4: DC-

Absolute Maximum Ratings($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Rating						Unit
		MB1S-10	MB2S-10	MB4S-10	MB6S-10	MB8S-10	MB10S-10	
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 $T_a = 50^{\circ}\text{C}$	I_o	1.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	35						A
Typical Junction Capacitance ^(Note1)	C_j	13						pF
Typical Thermal Resistance ^(Note2)	$R_{\theta JA}$	85						$^{\circ}\text{C}/\text{W}$
Typical Thermal Resistance ^(Note2)	$R_{\theta JL}$	30						$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	T_j, T_{stg}	$-55 \sim +150$						$^{\circ}\text{C}$

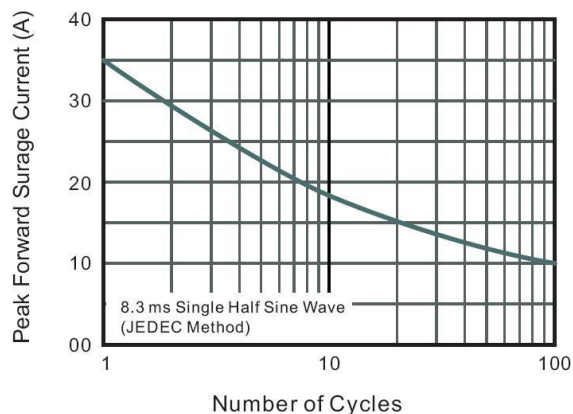
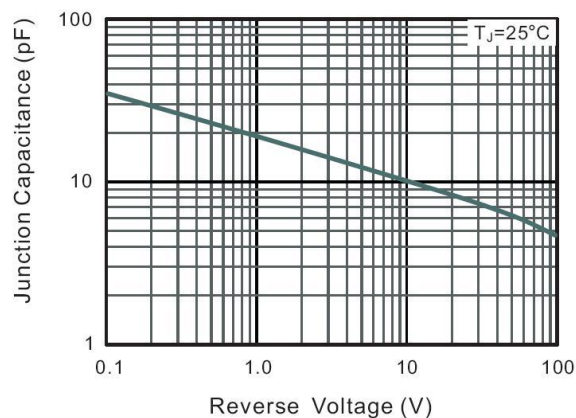
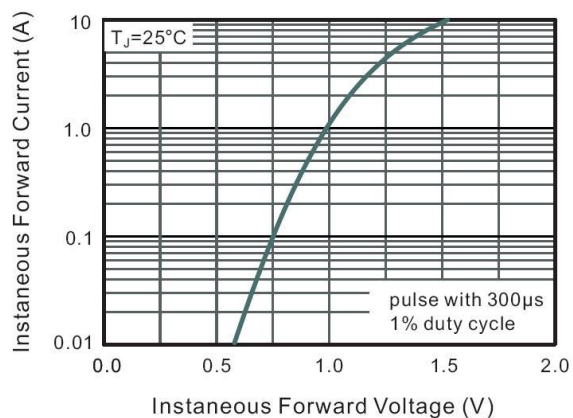
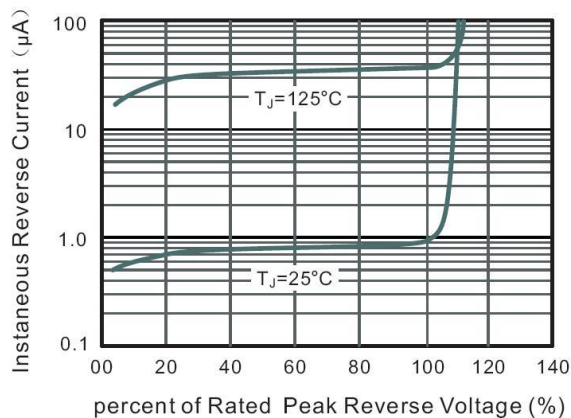
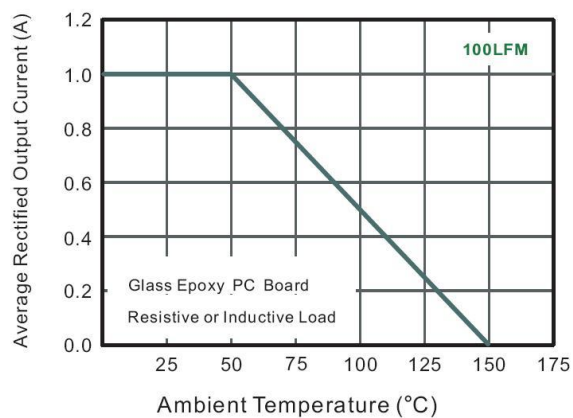
Note:

1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with $4 \times (5 \times 5 \text{mm}^2)$ copper pad.

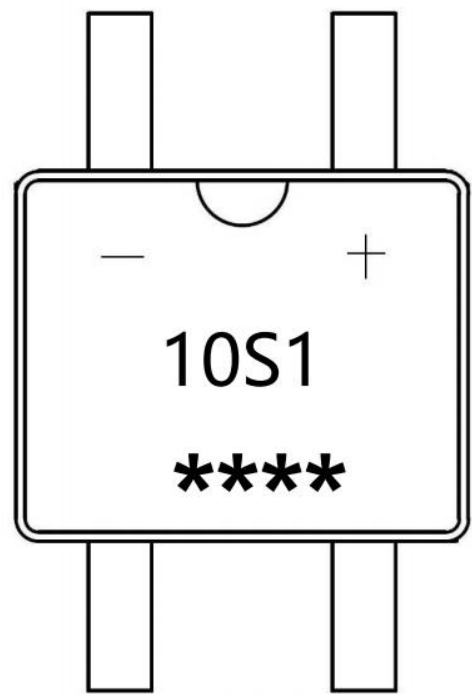
Electrical Characteristics($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Test condition	Rating	Unit
Maximum Forward Voltage	V_F	$I_F=1.0\text{A}$	1.1	V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I_R	$T_a=25^{\circ}\text{C}$ $T_a=125^{\circ}\text{C}$	5.0 40	μA

Electrical Characteristic Curve



Marking Instructions



Note:

10S1: Product Type Code

****: Lot No. Code, The 1st * means:YM Code, The last 3 * means:little Lot No Code

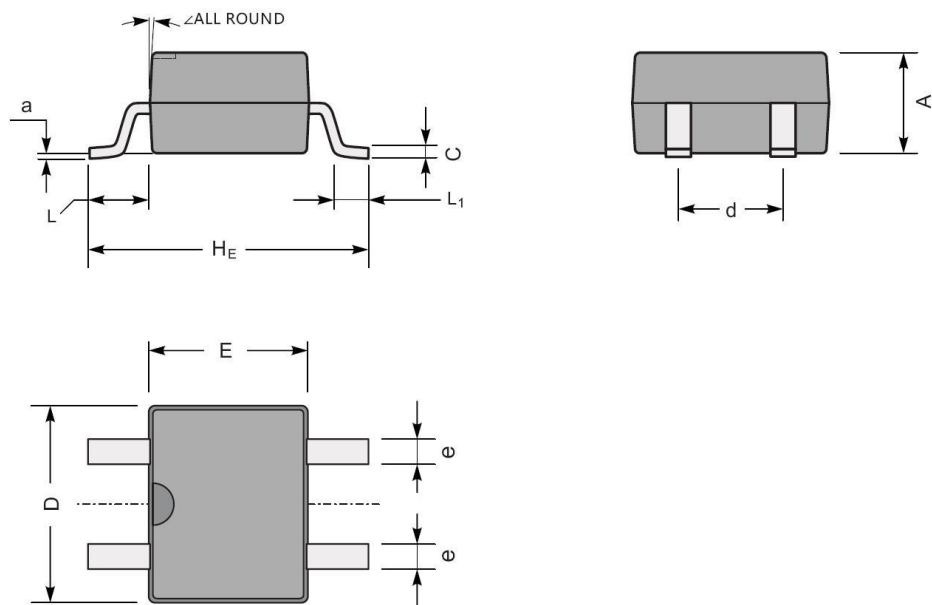
Packaging SPEC

REEL

Package Type	Units					Dimension (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
MBS	3000	2	6000	5	30000	13" ×15	336X336X40	380X335X366

Package Outline Dimensions

MBS



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	—	