



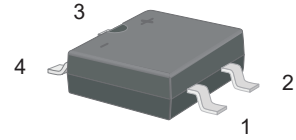
MB14S-PJ~MB120S-PJ

Surface Mount Glass Passivated Bridge Rectifiers

Features

- Glass Passivated Chip Junction
- Reverse Voltage: 40V to 200V
- High Surge Current Capability
- Designed for Surface Mount Application

MBS



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

Marking Code:

MB14S-PJ: MB14S
MB16S-PJ: MB16S
MB18S-PJ: MB18S
MB110S-PJ: MB110S
MB115S-PJ: MB115S
MB120S-PJ: MB120S

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	MB14S-PJ	MB16S-PJ	MB18S-PJ	MB110S-PJ	MB115S-PJ	MB120S-PJ	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	60	80	100	150	200	V
Maximum Average Rectified Output Current at $T_C = 100^\circ\text{C}$	I_O	1.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	40		30			A	
Maximum Instantaneous Forward Voltage at 1 A	V_F	0.55	0.70	0.85		0.90	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	0.3		0.2		0.1	mA	
	$T_A = 100^\circ\text{C}$	10		5		2		
Typical Junction Capacitance ^{Note1}	C_j	110	80				pF	
Typical Thermal Resistance ^{Note2}	$R_{\theta JA}$	100					$^\circ\text{C}/\text{W}$	
Junction Temperature	T_J	125					$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 to +150					$^\circ\text{C}$	

Note:

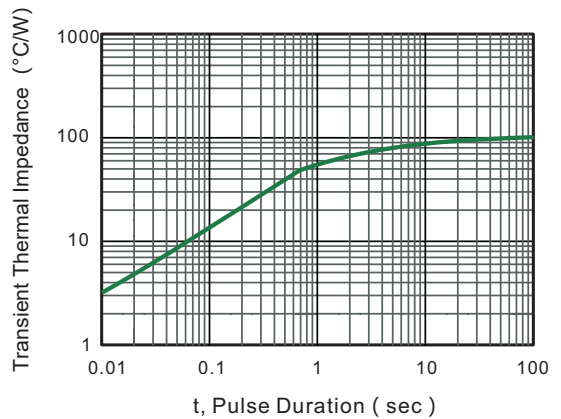
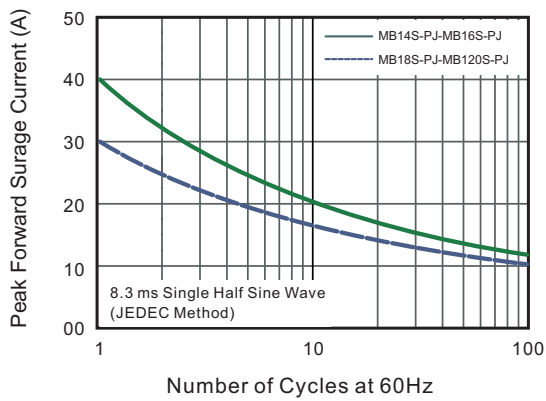
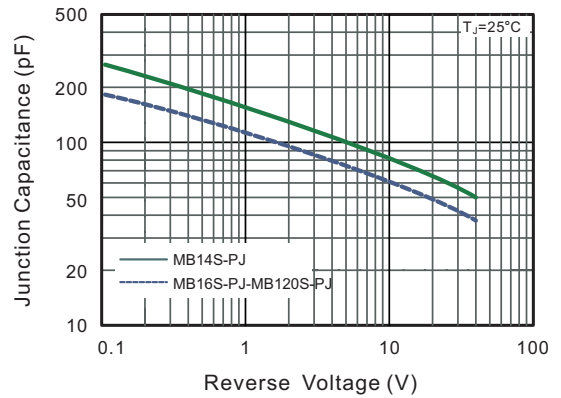
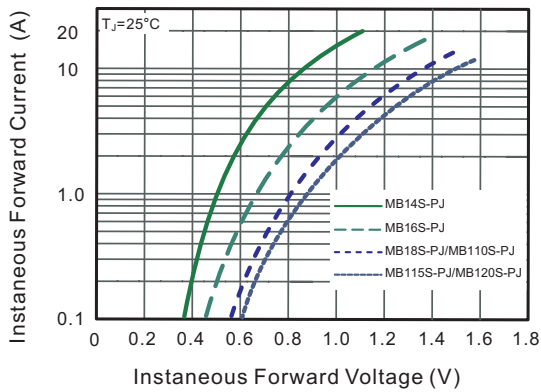
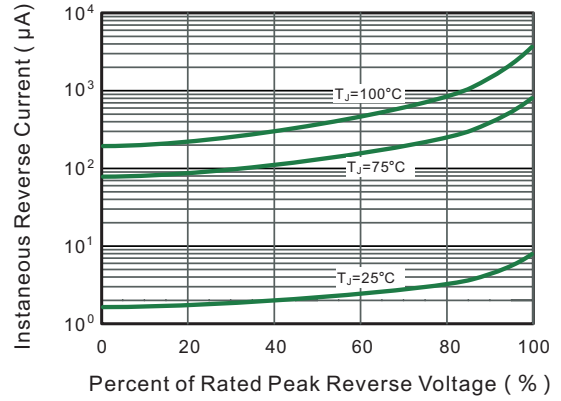
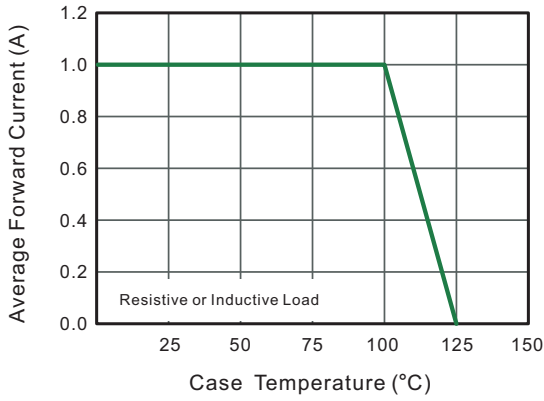
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.



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Typical Characteristic Curves





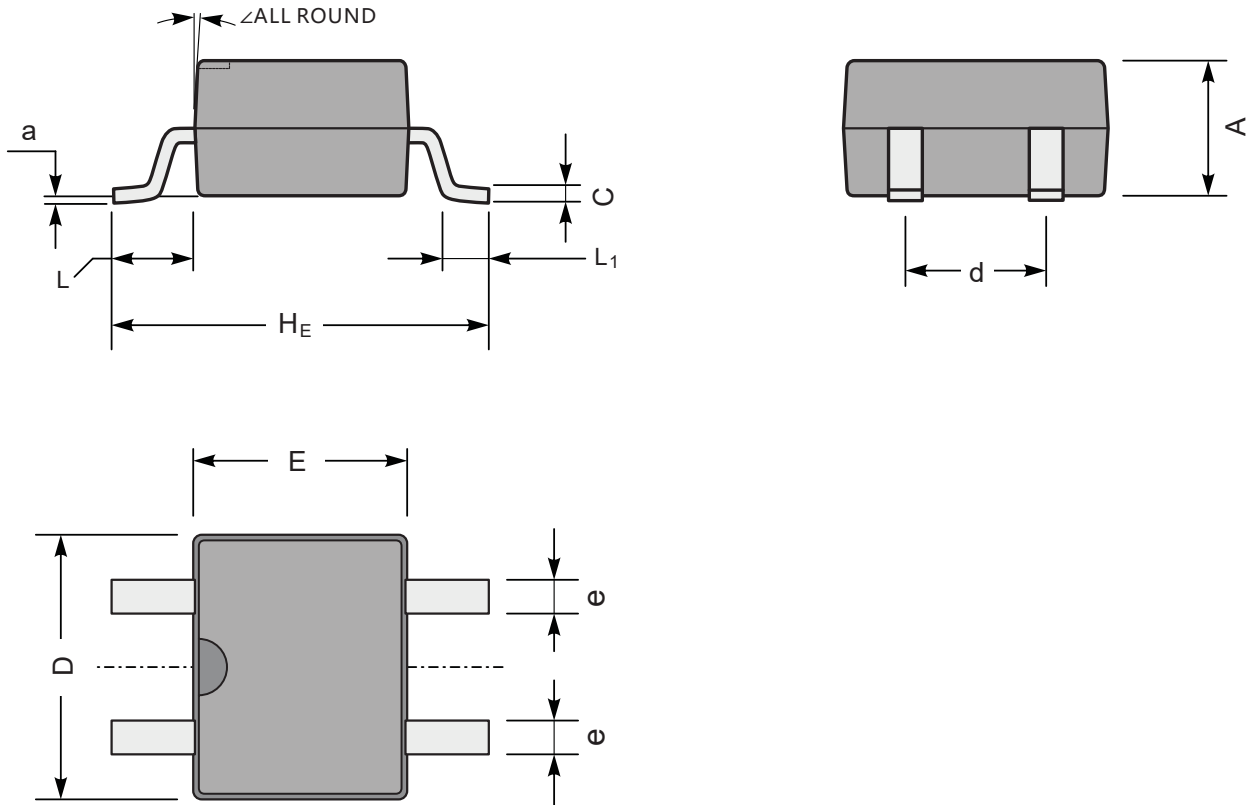
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Package Outline

MBS

Dimensions in mm



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	—	