



THE DATASHEET OF MB14S

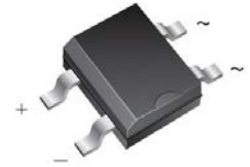


MB12S thru MB110S

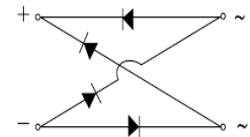
Surface Mount Schottky Bridge Rectifiers
 Reverse Voltage 20V to 100V Forward Current 1A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junctions
- High surge overload rating: 30A peak
- Space saving
- High temperature soldering guaranteed: 260°C/10 seconds



Package: TO-269AA (MBS)



Schematic Diagram

Mechanical Data

- Case: Molded plastic body over passivated junctions
- Terminals: plated leads solderable per MIL-STD-750 Method 2026
- Mounting Position: Any

Maximum Ratings & Electrical Characteristics

($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	MB12S	MB14S	MB16S	MB18S	MB110S	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	V
Maximum Average Forward Output Current	$I_{F(AV)}$	1					A
Peak Forward Surge Current 8.3 MS Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30					A
Rating for Fusing ($t \leq 8.3\text{ms}$)	I^2t	3.75					A ² s
Maximum Instantaneous Forward Voltage at 1.0A	V_F	0.5		0.7		0.85	V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Leg	I_R	0.5					mA
		20					
Typical Junction Capacitance per at 4.0 V, 1.0 MHz	C_J	13					pF
Typical Thermal Resistance per Leg (Note1)	$R_{\theta JA}$	88					°C/W
	$R_{\theta JL}$	28					
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150					°C

Notes: 1. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2×0.2"(5.0×5.0mm) copper pad areas.

MB12S thru MB110S

Surface Mount Schottky Bridge Rectifiers
 Reverse Voltage 20V to 100V Forward Current 1A

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

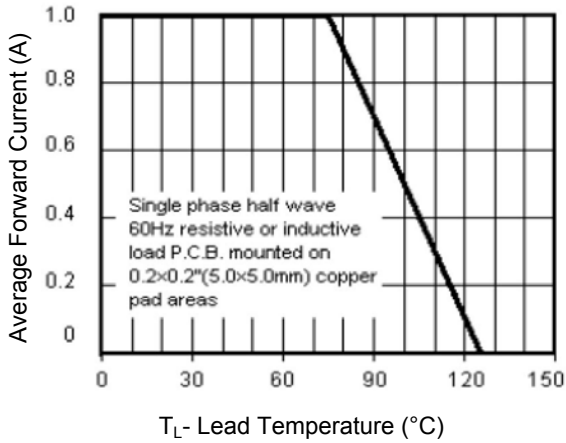


Figure 1. Forward Current Derating Curve

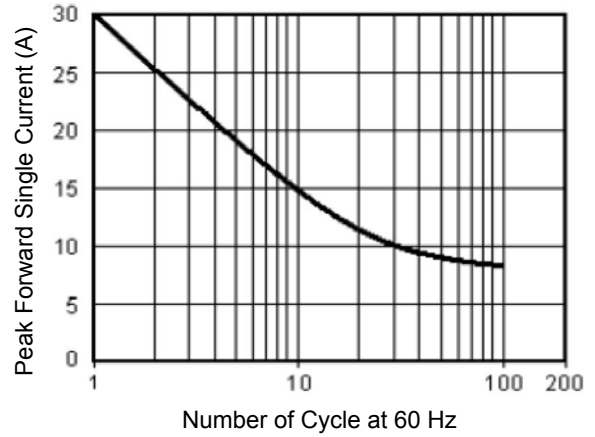


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

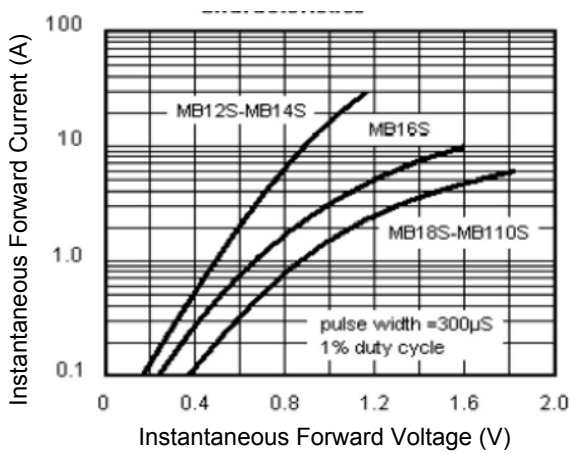


Figure 3. Typical Instantaneous Forward Characteristics

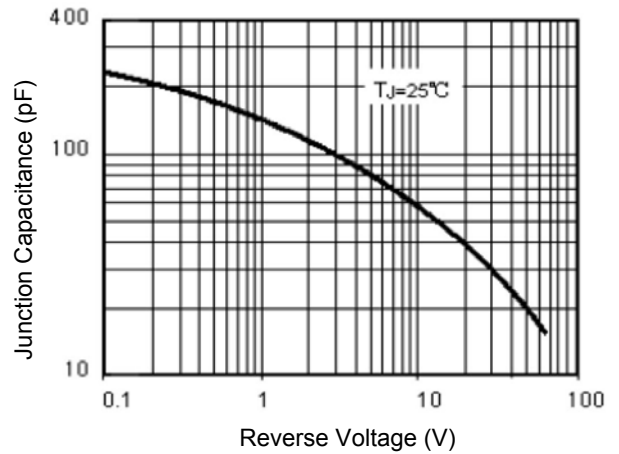


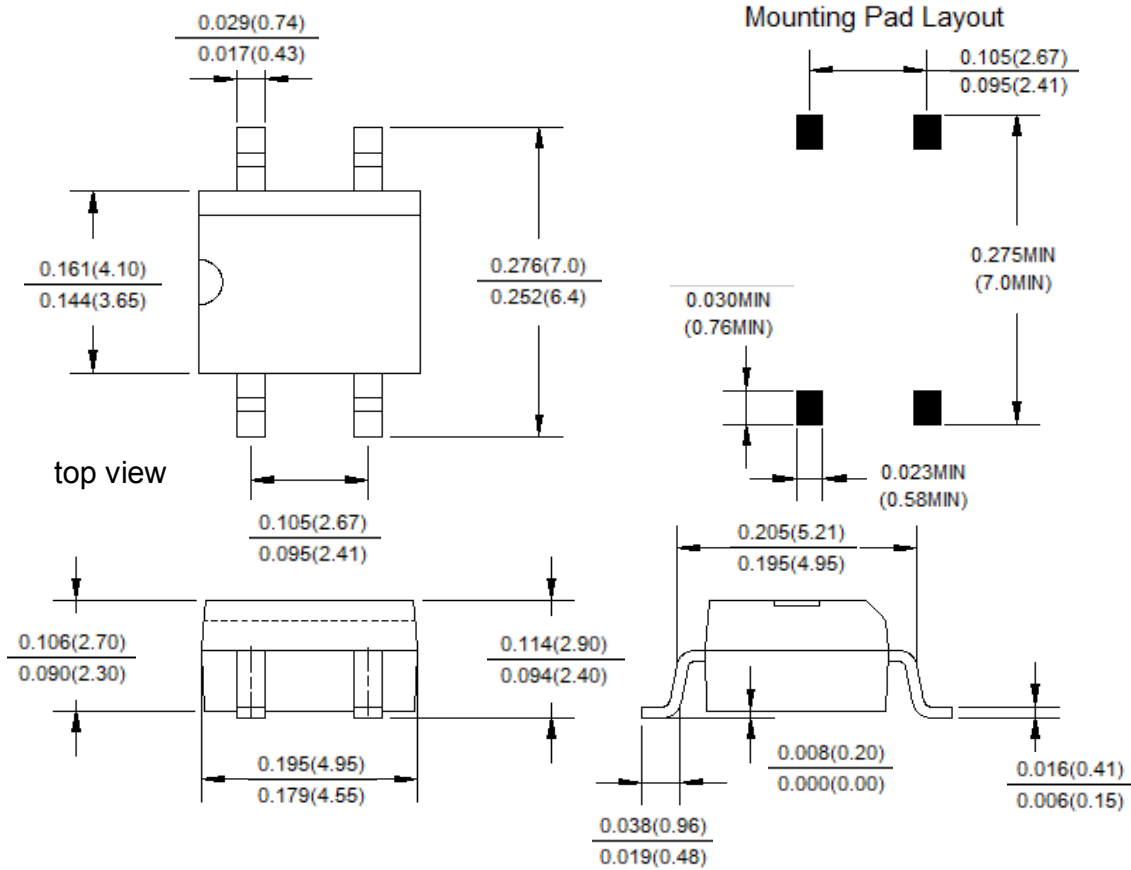
Figure 4. Typical Junction Capacitance

MB12S thru MB110S

Surface Mount Schottky Bridge Rectifiers
 Reverse Voltage 20V to 100V Forward Current 1A



Package Outline Dimensions TO-269AA (MBS)

Unit: inches (mm)



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View MB14S on WIN SOURCE](#)
-  [GOOD-ARK Electronics Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management