

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 75 Volts

**POWER** 200 mWatts

**PACKAGE** SOT-323

### FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance

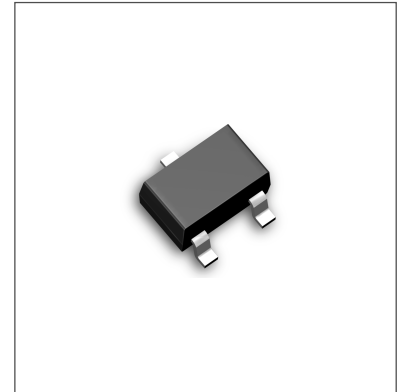
### MECHANICAL DATA

Case: SOT-323, Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Approx. Weight: 0.008 gram

Marking: A2, A3



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

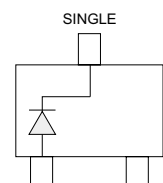
For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	MMBD4148W	MMBD4448W	UNITS
Reverse Voltage	V <sub>R</sub>	75	75	V
Peak Reverse Voltage	V <sub>RM</sub>	100	100	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and f >=50 Hz	I <sub>o</sub>	150	150	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	2.0	4.0	A
Power Dissipation Derate Above 25°C	P <sub>TOT</sub>	200	200	mW
Maximum Forward Voltage @ I <sub>F</sub> =5mA @ I <sub>F</sub> =10mA	V <sub>F</sub>	- 1.0	0.72 1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> = 25°C	I <sub>R</sub>	2.5	2.5	μA
Typical Junction Capacitance( Notes1)	C <sub>J</sub>	4.0	4.0	pF
Maximum Reverse Recovery (Notes2)	T <sub>RR</sub>	4.0	4.0	ns
Maximum Thermal Resistance	RθJA	357		°C / W
Storage Temperature Range	T <sub>J</sub>	-55 TO +125		°C

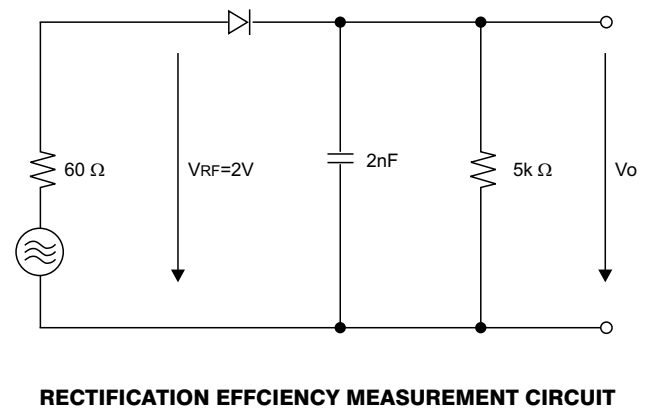
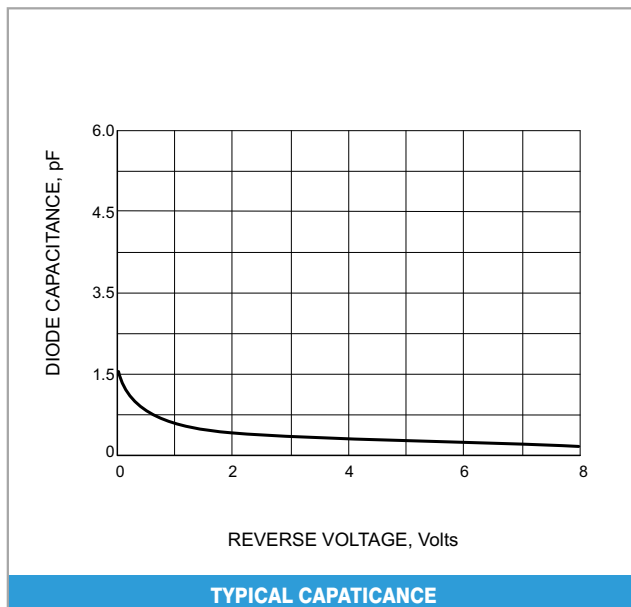
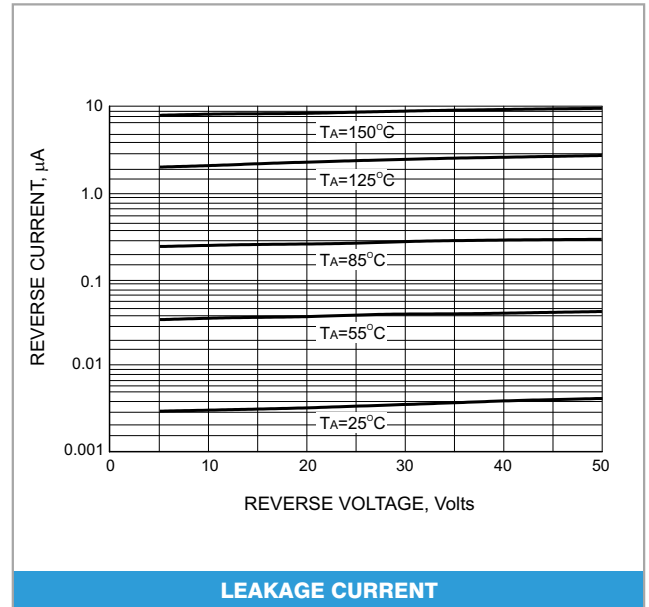
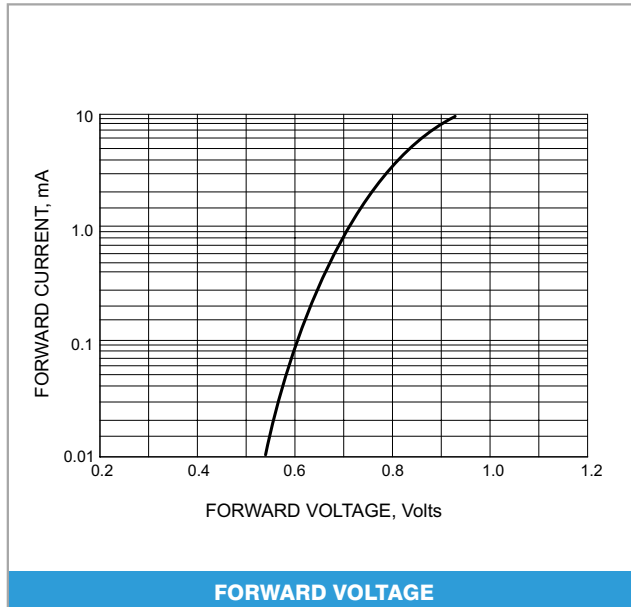
NOTE:

1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ

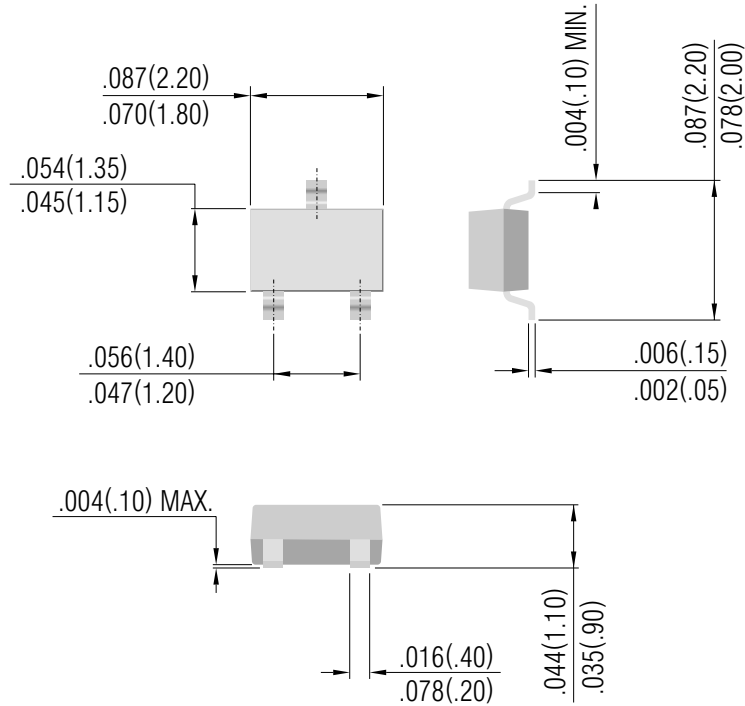
2.From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω



MMBD4148W, MMBD4448W



**SOT-323**



Dimensions in inches and (millimeters)

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