



# DATA SHEET

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

## MMBD4148W/MMBD4448W/BAS16W

### SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 100 Volts **POWER** 200mWatts

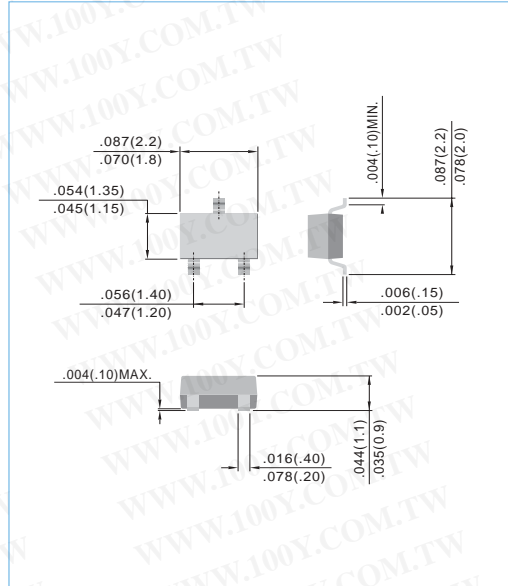
**SOT-323** Unit: inch (mm)

#### FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion.
- Both normal and Pb free product are available :  
 Normal : 80~95% Sn, 5~20% Pb  
 Pb free: 98.5% Sn above

#### MECHANICAL DATA

Case: SOT-323 plastic case.  
 Terminals : Solderable per MIL-STD-202, Method 208  
 Standard packaging: 8mm tape  
 Weight: approximately 0.0052 g

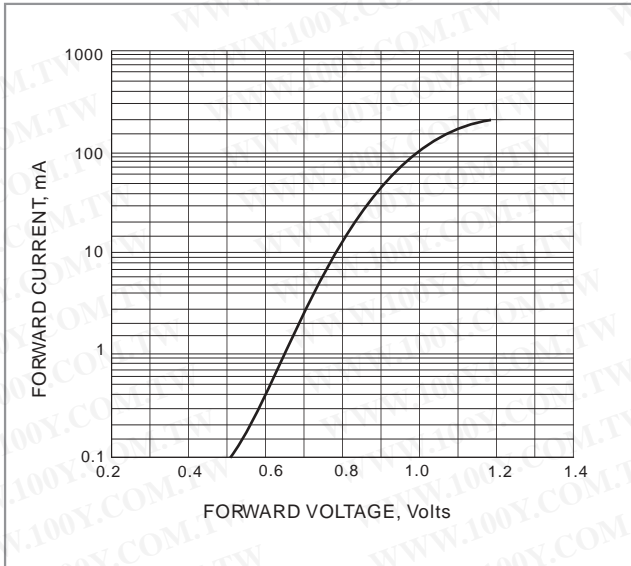


### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless otherwise noted)

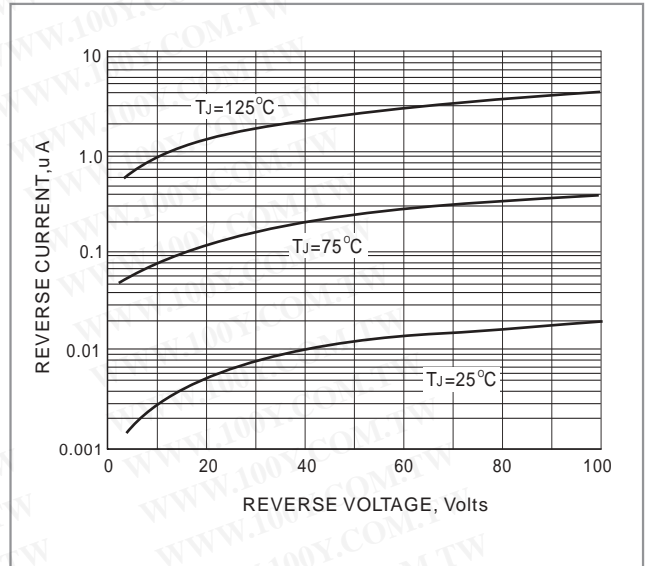
PARAMETER	SYMBOL	MMBD 4148W	MMBD 4448W	BAS16W	UNITS
Marking Code		A2	A3	A6	
Reverse Voltage	V <sub>R</sub>	75			V
Peak Reverse Voltage	V <sub>RM</sub>	100			V
RMS Voltage	V <sub>RMS</sub>	50			V
Maximum DC Blocking Voltage	V <sub>DC</sub>	75			V
Maximum Average Forward Current at T <sub>a</sub> =25°C	I <sub>F</sub>	150			mA
Peak Forward Surge Current, 1.0us	I <sub>FSM</sub>	2	4	2	A
Power Dissipation Derate Above 25°C	P <sub>TOT</sub>	200			mW
Maximum Forward Voltage	V <sub>F</sub>	0.715@ 0.001A 0.855@ 0.01A 1.0@ 0.05A 1.25@ 0.15A	0.72 / 0.005A 1.0 / 0.1A	0.855 / 0.01A	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> = 25°C	I <sub>R</sub>	0.025@ 20V 2.5@ 75V	2.5@ 75V	1.0@ 75V	µA
Junction Capacitance (Notes1)	C <sub>J</sub>	1.5	4.0	2.0	pF
Maximum Reverse Recovery (Notes2)	T <sub>RR</sub>	4.0	4.0	6.0	ns
Maximum Thermal Resistance	R <sub>θJA</sub>	640			°C /W
Storage Temperature Range	T <sub>J</sub>	-55 to +150			°C

**NOTE:**

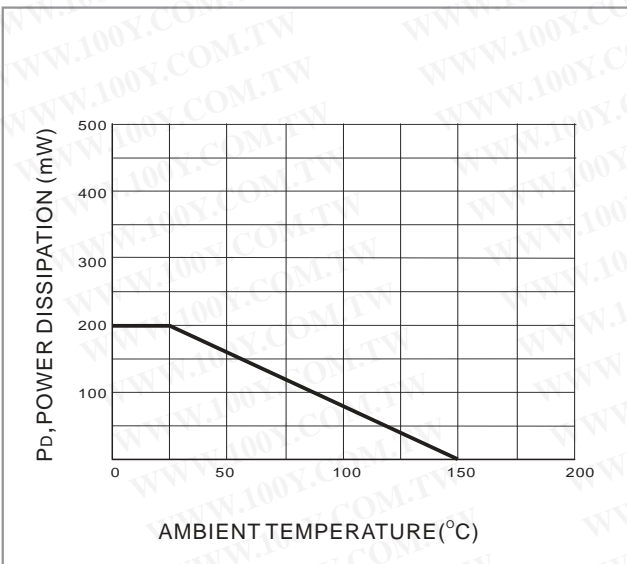
1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ
2. From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω



**FIG. 1-TYPICAL FORWARD CHARACTERISTIC**



**FIG. 2-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 3 POWER DERATING CURVE**

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