



# DATA SHEET

## MMBD4148/MMBD4448

### SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 100 Volts **POWER** 250mWatts

#### FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion.
- Lead free in comply with EU RoHS 2002/95/EC directives.

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

PARAMETER	SYMBOL	MMBD4148	MMBD4448	UNITS
Marking Code		A2	A3	
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 Ta=25°C	I <sub>AV</sub>	150		mA
Peak Forward Surge Current, 1.0us	I <sub>FSM</sub>	4		A
Power Dissipation Derate Above 25°C	P <sub>TOT</sub>	250		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	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	uA
Junction Capacitance( Notes1)	C <sub>J</sub>	1.5	4.0	pF
Maximum Reverse Recovery (Notes2)	T <sub>RR</sub>	4.0	4.0	ns
Typical Thermal Resistance	R <sub>θJA</sub>	357		°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

