

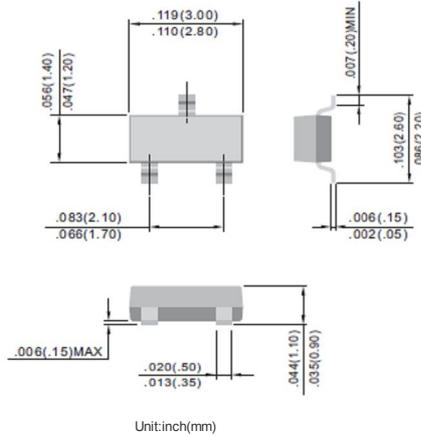


MMBD4148, MMBD4448, BAS16

Surface Mount Switching Diodes

Voltage 100 volts Power 250mwatts

SOT-23



FEATURES

- ◆ Fast switching speed
- ◆ Electrically identical to standard JEDEC
- ◆ Surface mount package ideally suited for automatic insertion
- ◆ High conduction
- ◆ 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-23, plastic case

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

Approx. Weight:0.008g

Standard packaging: 8mm tape

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

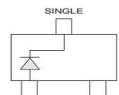
T_J=25°C unless otherwise noted

	SYMBOL	MMBD4148	MMBD4448	BAS16	UNITS
Marking Code		A2	A3	A6	
Reverse Voltage	V _R		75		Volts
Peak Reverse Voltage	V _{RM}		100		Volts
RMS Voltage	V _{RMS}		50		Volts
Maximum DC Blocking Voltage	V _{DC}		75		Volts
Maximum Average Forward Current at Ta=25°C	I _{AV}		150		mAmps
Peak forward surge current 1.0us	I _{FSM}	2.0	4.0	2.0	Amps
Power Dissipation Derate Above 25°C	P _{TOT}		250		mWatts
Maximum Forward Voltage	V _F	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	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J =25°C	I _R	0.025@20V 2.5@75V	2.5@75V	1.0@75V	uA
Typical junction capacitance (NOTE 1)	C _J	1.5	4.0	2.0	pF
Maximum Reverse Recovery (NOTE 2)	t _{rr}	4.0	4.0	6.0	ns
Maximum Thermal Resistance	R _{θJA}		357		°C/W
Storage Temperature Range	T _J		-55 to +150		°C

NOTES:

1. C_J at V_R=0, f=1MHZ .

2. From I_F=10mA to I_R=1mA, V_R=6 volts, R_L=100Ω



RATINGS AND CHARACTERISTIC CURVES

Fig.1 Typical Forward Characteristics

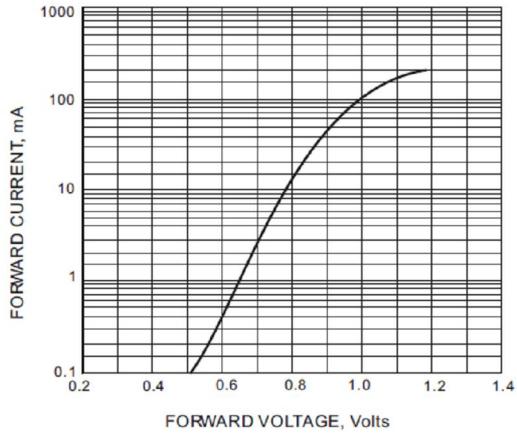


Fig.2 Typical Reverse Characteristics

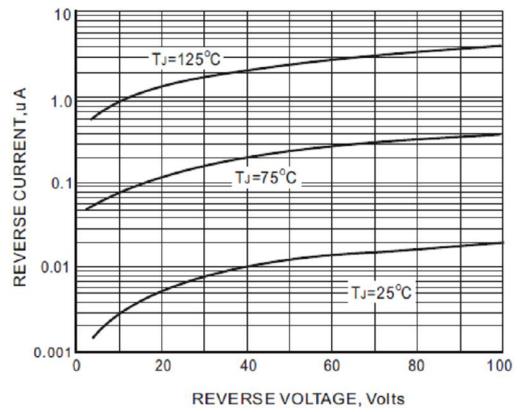


Fig.3 Forward Derating Curve

