PANJIT SEMI CONDUCTOR

DATA SHEET

MMBD4148W/MMBD4448W/BAS16W

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 200mWatts

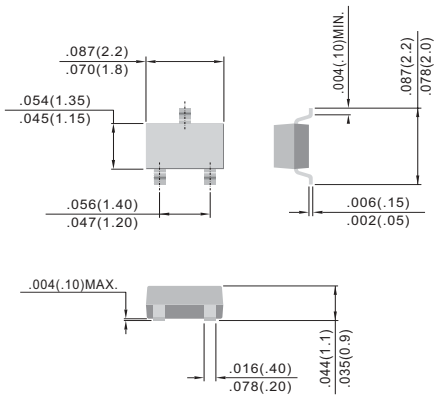
FEATURES

- Fast switching Speed.
- Electrically Identical to Standerd 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

SOT-323 Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TJ=25°C unless otherwise noted)

PARAMETER	SYMBOL	MMBD4148W	MMBD4448W	BAS16W	UNITS
Marking Code		A2	A3	A6	
Reverse Voltage	V_R	75			V
Peak Reverse Voltage	V_{RM}	100			V
RMS Voltage	V_{RMS}	50			V
Maximum DC Blocking Voltage	V_{DC}	75			V
Maximum Average Forward Current at Ta=25°C	I_{AV}	150			mA
Peak Forward Surge Current, 1.0us	I_{FSM}	2	4	2	A
Power Dissipation Derate Above 25°C	P_{TOT}	200			mW
Maximum Forward Voltage	V_F	0.715@ 0.001A 0.855@ 0.01A 1.00@ 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 TJ= 25°C	I_R	0.025@ 20V 2.5@ 75V	2.5@ 75V	1.0@ 75V	uA
Junction Capacitance (Notes1)	CJ	1.5	4.0	2.0	pF
Maximum Reverse Recovery (Notes2)	T_{RR}	4.0	4.0	6.0	ns
Maximum Thermal Resistance	$R_{\theta JA}$	640			°C /W
Storage Temperature Range	T_J	-55 to +150			°C

NOTE:
1. CJ at V_R=0, f=1MHZ
2.From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω

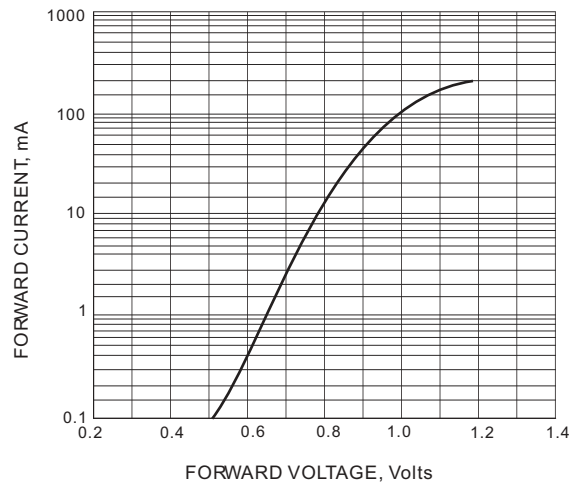


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

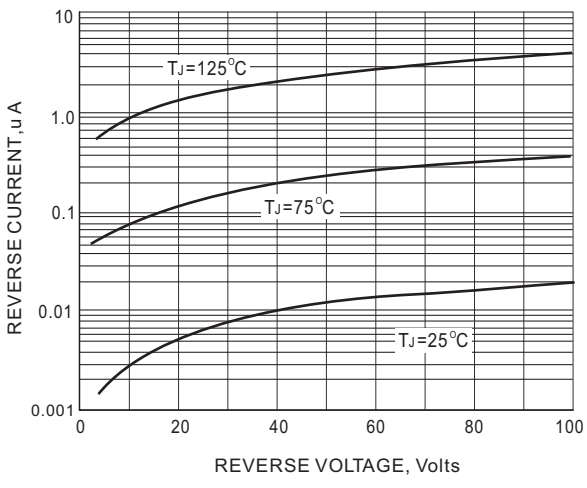


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

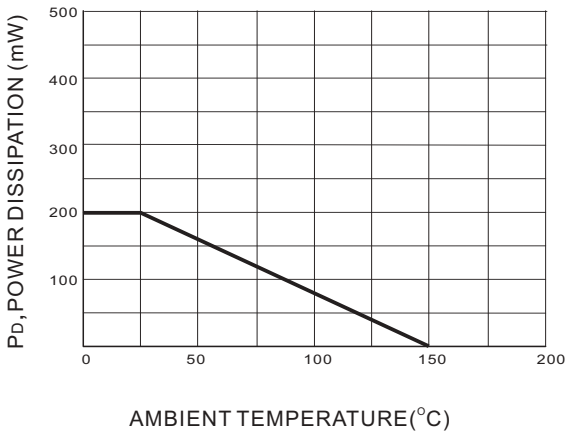


FIG. 3 POWER DERATING CURVE