

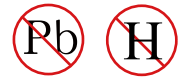


YEA SHIN TECHNOLOGY CO., LTD

MMBD4148/ MMBD4448

## SURFACE MOUNT SWITCHING DIODES

VOLTAGE: 75 Volts POWER: 250mW

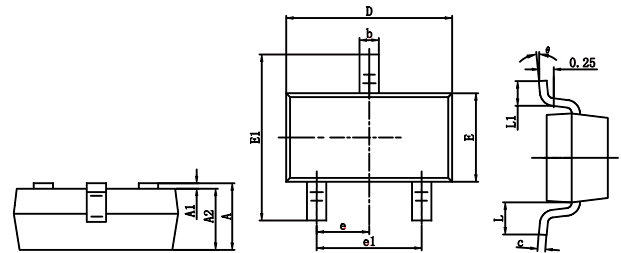


### FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion.
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

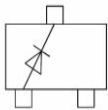
SOT-23

Unit:inch(mm)



### MECHANICAL DATA

- Case: SOT-23 plastic case.
- Terminals : Solderable per MIL-STD-202,Method 208
- Standard packaging: 8mm tape
- Weight: approximately 0.008g



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	6°

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

PARAMETER	SYMBOL	MMBD4148	MMBD4448	UNITS
Marking Code		KA2	KA3	
Reverse Voltage	VR	75		V
Peak Reverse Voltage	VRM	100		V
RMS Voltage	VRMS	50		V
Maximum DC Blocking Voltage	VDC	75		V
Maximum Average Forward Current at Ta=25	IAV	150		mA
Peak Forward Surge Current, 1.0us	IFSM	2	4	A
Power Dissipation Derate Above 25	PTOT	250		mW
Maximum Forward Voltage	VF	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 TJ=25	IR	0.03@25V 2.5@75V	2.5@75V	uA
Junction Capacitance(Notes1)	JC	1.5	4.0	pF
Maximum Reverse Recovery(Notes2)	TRR	4.0		ns
Maximum Thermal Resistance	RθA	357		/W
Storage Temperature Range	TJ	-55 to +150		

#### NOTE:

- CJ at VR=0, f=1MHZ
- From IF=10mA to IR=1mA, VR=6Volts, RL=100Ω

# DEVICE CHARACTERISTICS

## MMBD4148/ MMBD4448

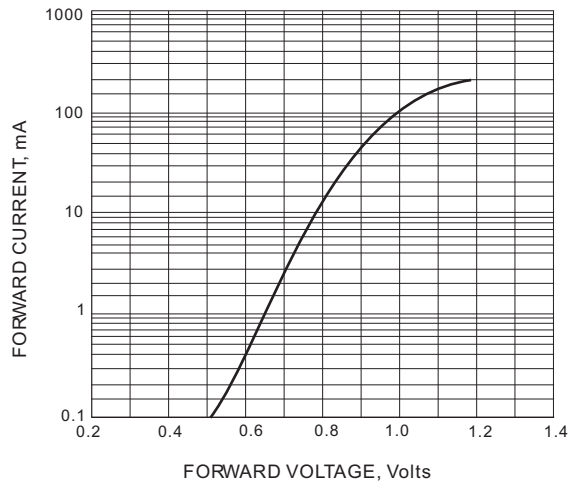


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

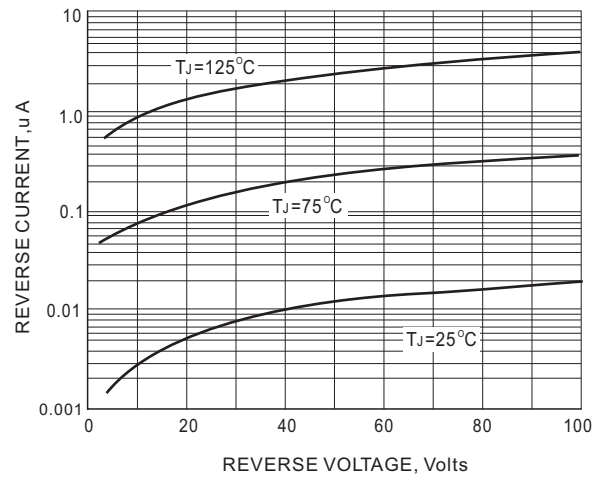


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

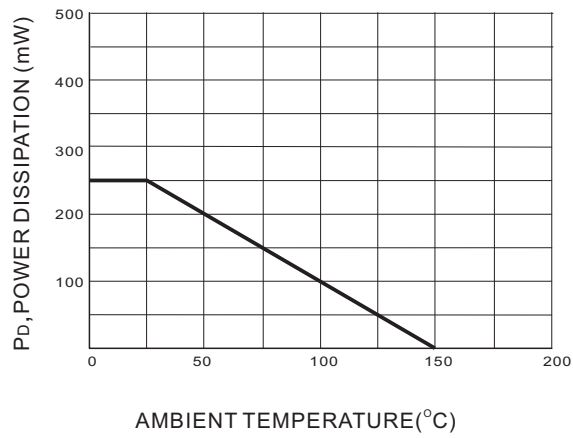


FIG. 3 POWER DERATING CURVE