

MMBD4148 / MMBD4448

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volt **POWER** 250mWatt

SOT-23

Unit : inch(mm)

FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion.
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

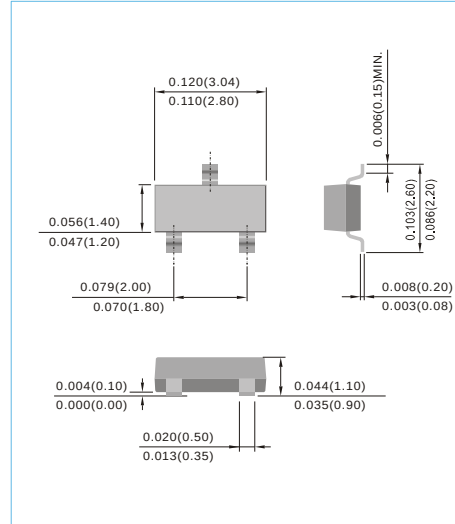
MECHANICAL DATA

Case : SOT-23 plastic case.

Terminals : Solderable per MIL-STD-750, Method 2026

Standard packaging : 8mm tape

Approx weight : 0.0003 ounces, 0.0084 grams



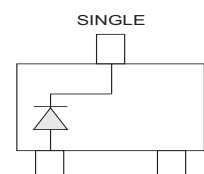
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_J = 25°C unless otherwise noted)

PARAMETER	SYMBOL	MMBD4148	MMBD4448	UNITS
Marking Code		A2	A3	
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 T _a = 25°C	I _{AV}	150		mA
Peak Forward Surge Current, 1.0us	I _{FSM}	4		A
Power Dissipation Derate Above 25°C	P _{TOT}	250		mW
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	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J = 25°C	I _R	0.025@20V 2.5@75V	2.5@75V	uA
Junction Capacitance(Notes1)	C _J	1.5	4.0	pF
Maximum Reverse Recovery (Notes2)	T _{RR}	4.0	4.0	ns
Typical Thermal Resistance	R _{θJA}	357		°C / W
Storage Temperature Range	T _J	-55 to +150		°C

NOTE:

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

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



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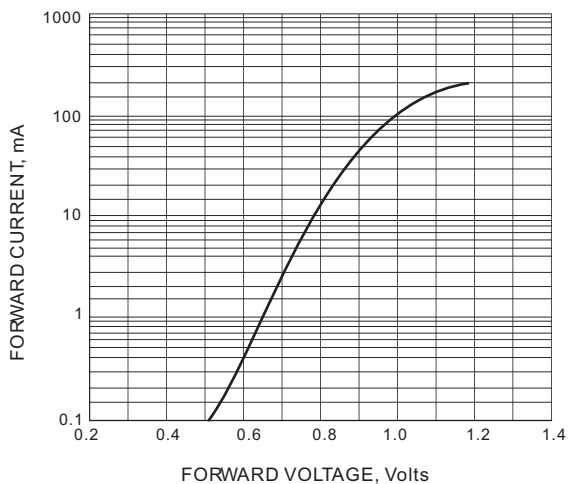


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

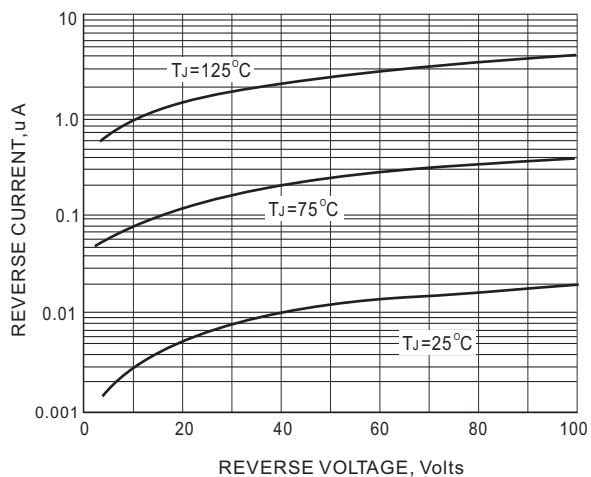


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

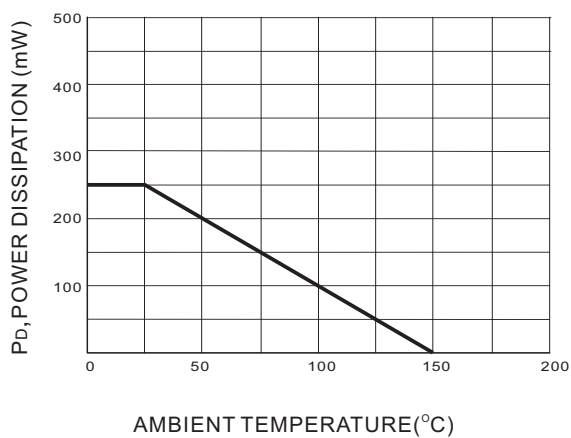


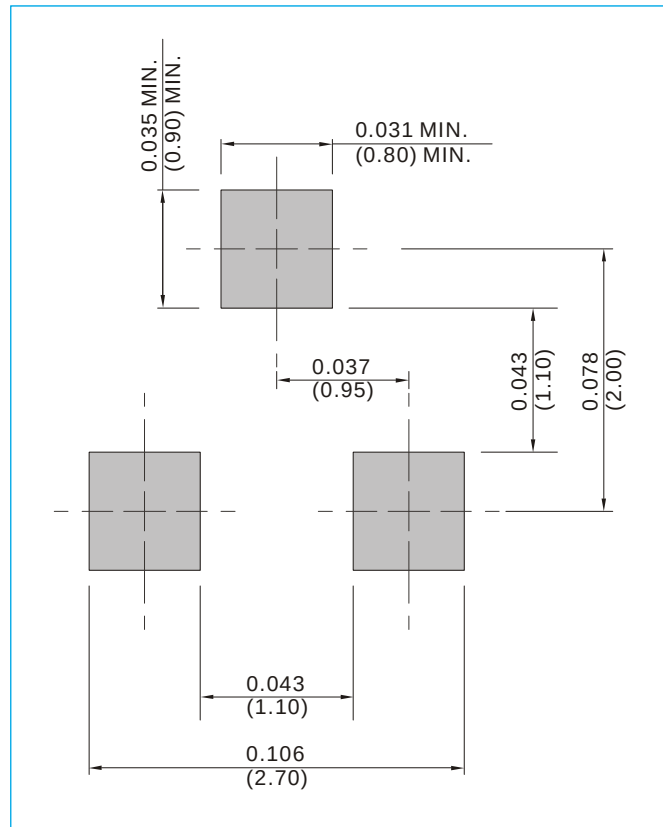
FIG. 3 POWER DERATING CURVE

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MOUNTING PAD LAYOUT

SOT-23

Unit : inch(mm)



ORDER INFORMATION

- Packing information

T/R - 12K per 13" plastic Reel

T/R - 3K per 7" plastic Reel

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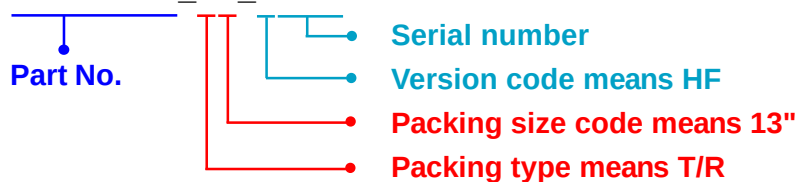
Part No_packing code_Version

MMBD4148_R1_00001

MMBD4148_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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