

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)

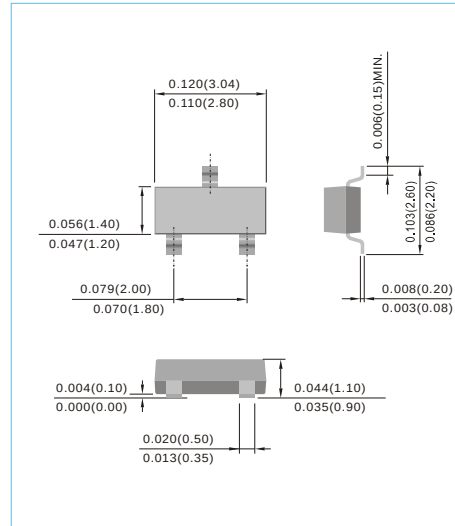
MECHANICAL DATA

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



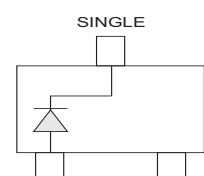
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_J = 25°C unless otherwise noted)

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



MMBD4148 / MMBD4448

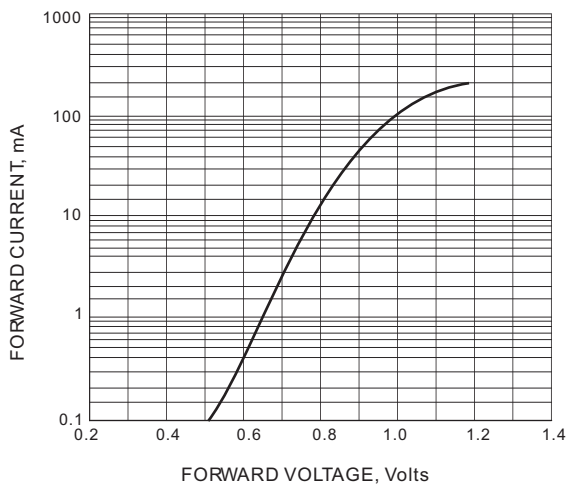


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

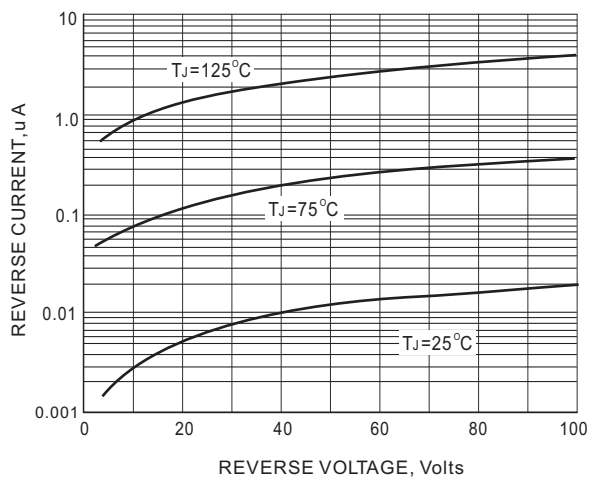


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

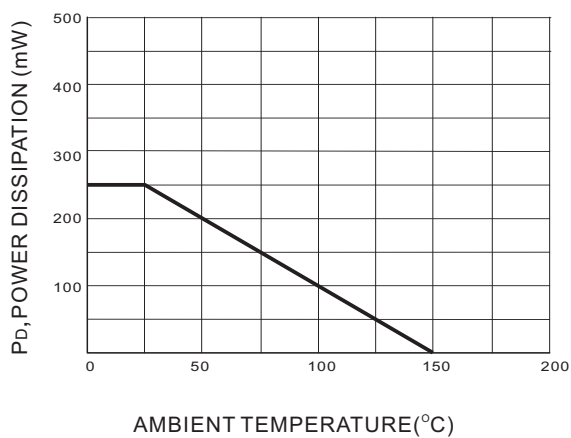


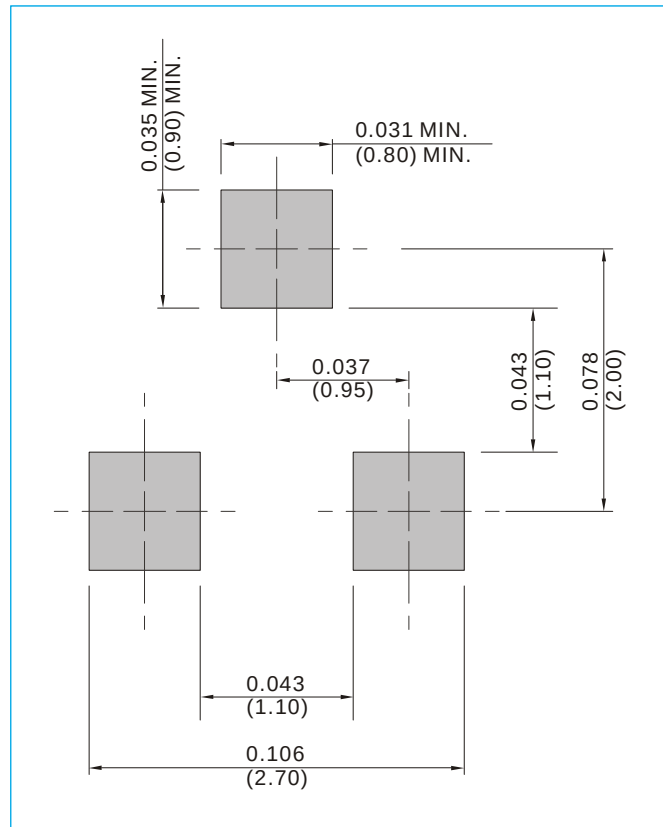
FIG. 3 POWER DERATING CURVE

MMBD4148 / MMBD4448

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

MMBD4148 / MMBD4448

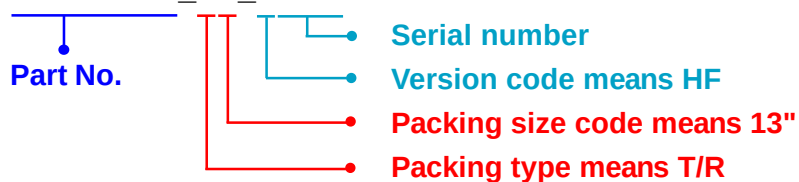
Part No_packing code_Version

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			



MMBD4148 / MMBD4448

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panjit:

[MMBD4148_R1_00001](#) [MMBD4148_R1_10001](#) [MMBD4148_R2_00001](#) [MMBD4148_R2_10001](#)