



DATA SHEET

MMBD4148W/MMBD4448W/BAS16W

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 200mWatts

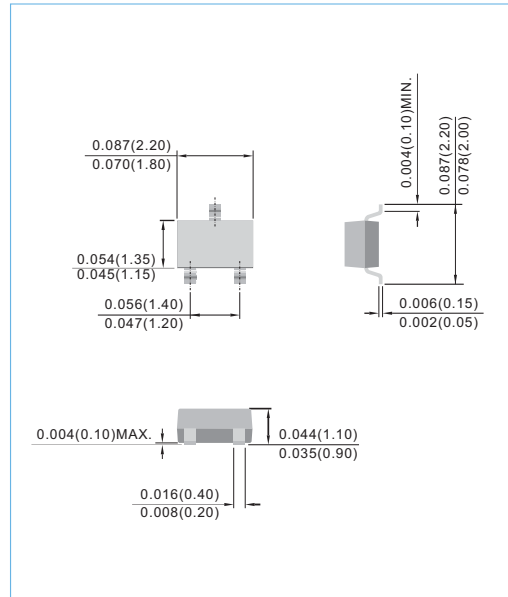
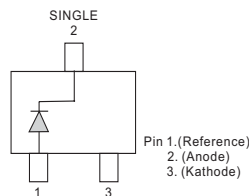
SOT-323 Unit: inch (mm)

FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion.
- Standard JEDEC Pin Configuration
- Standard JEDEC Pin Configuration

MECHANICAL DATA

Case: SOT-323 plastic case.
Terminals : Solderable per MIL-STD-750, Method 2026
Standard packaging: 8mm tape
Weight: approximately 0.0052 g



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_J=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 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}	200			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	0.855 / 0.01A	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	1.0@75V	uA
Junction Capacitance(Notes1)	C _J	1.5	4.0	2.0	pF
Maximum Reverse Recovery (Notes2)	T _{RR}	4.0	4.0	6.0	ns
Typical Thermal Resistance	R _{θJA}	640			°C / W
Operation and 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

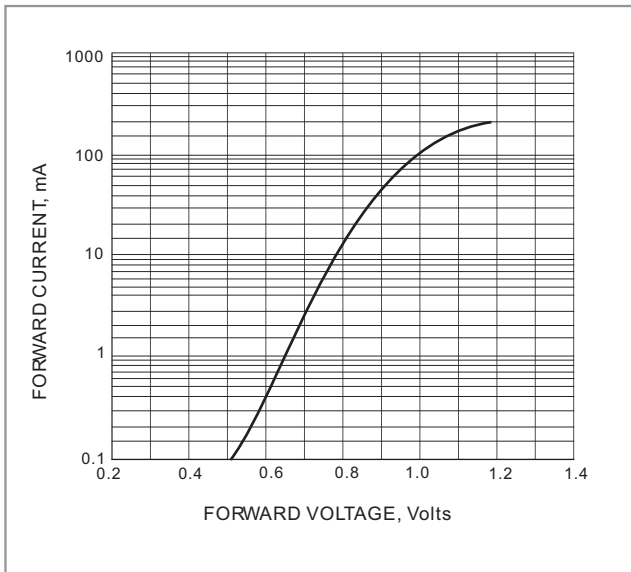


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

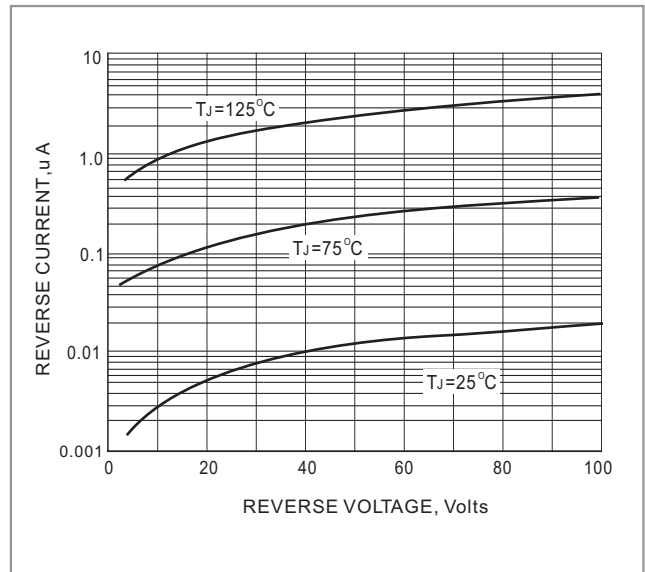


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

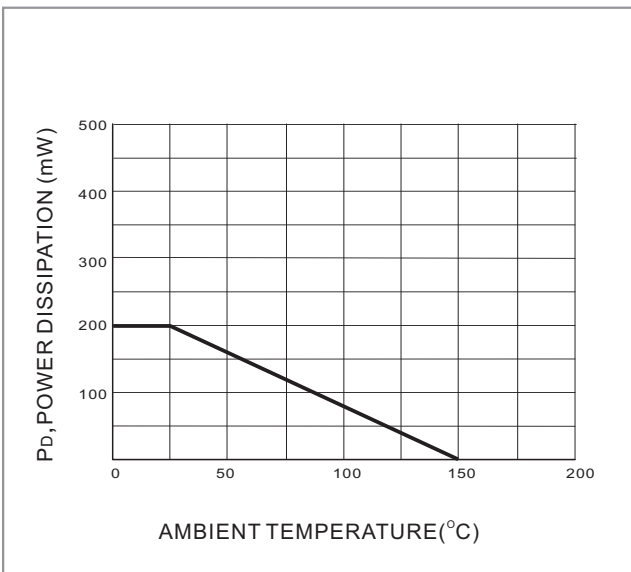
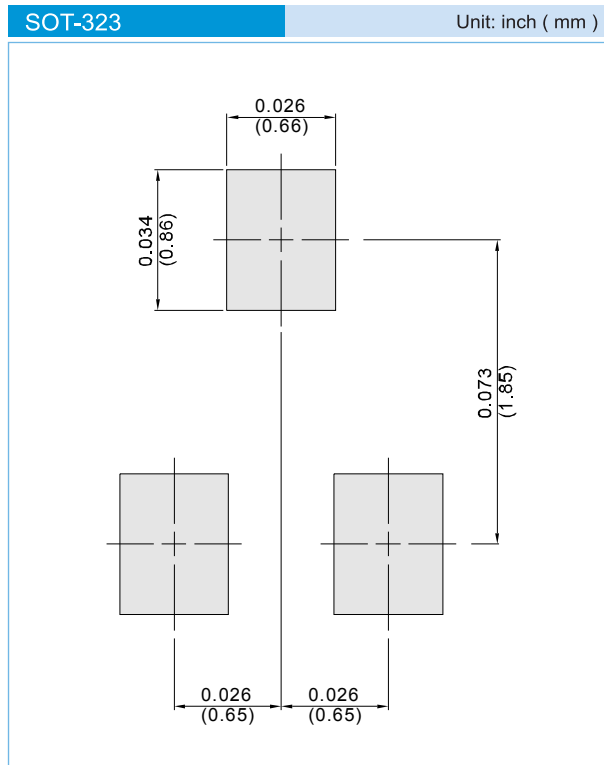


FIG. 3 POWER DERATING CURVE



MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel



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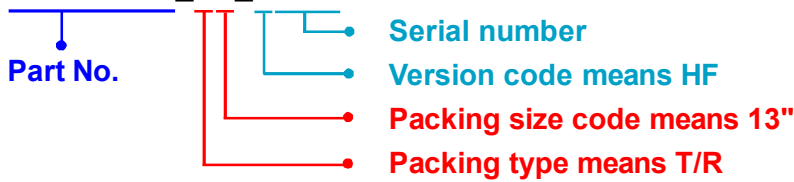
Part No_packing code_Version

MMBD4148W_R1_00001

MMBD4148W_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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