

MMBD4148TS

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volt **POWER** 200mWatt

SOD-523

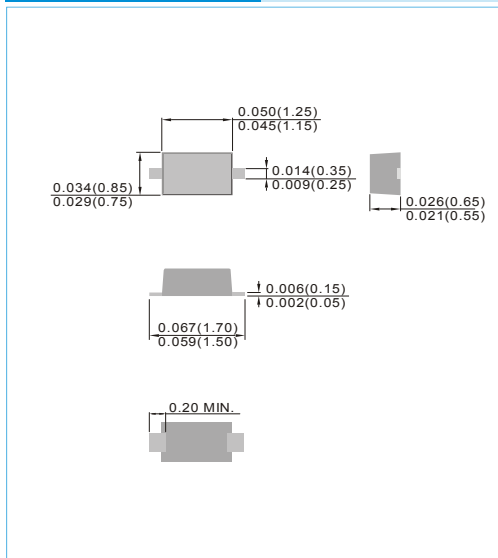
Unit : inch(mm)

FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- Surface Mount Package Ideally Suited for Automatic Insertion.
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: SOD-523 plastic case.
- Terminals : Solderable per MIL-STD-750, Method 2026
- Standard packaging: 8mm tape
- Approx. Weight : 0.0001 ounces, 0.0014 grams
- Marking Code: A2



ABSOLUTE RATINGS (T_A=25°C , unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Reverse Voltage	V _R	75	V
Peak Reverse Voltage	V _{RRM}	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 _{F(AV)}	150	mA
Peak Forward Surge Current, 1.0 μs	I _{FSM}	4	A
Power Dissipation Derate Above 25 °C	P _{TOT}	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{STG}	-55 to 150	°C

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNITS
Typical Thermal Resistance	R _{θJA}	635	°C / W

MMBD4148TS

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	VALUE	UNITS
Maximum Forward Voltage	V_F	$I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$	0.715 0.855 1.00 1.25	V
Reverse Leakage Current	I_R	$V_R = 20\text{V}$ $V_R = 75\text{V}$	0.025 2.5	μA
Maximum Total Capacitance	C_T	$V_R = 0\text{V}$, $f = 1\text{MHz}$	1.5	pF
Maximum Reverse Recovery Time	t_{rr}	$I_F = 10\text{mA}$, $I_R = 1\text{mA}$ $V_R = 6\text{V}$, $R_L = 100\Omega$	4	ns

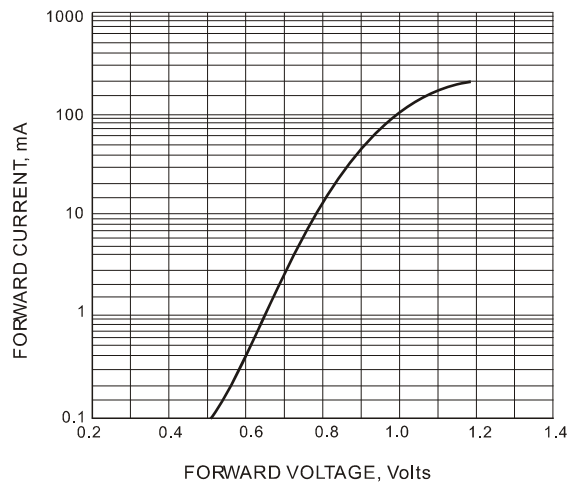


FIG. 1 TYPICAL FORWARD CHARACTERISTIC

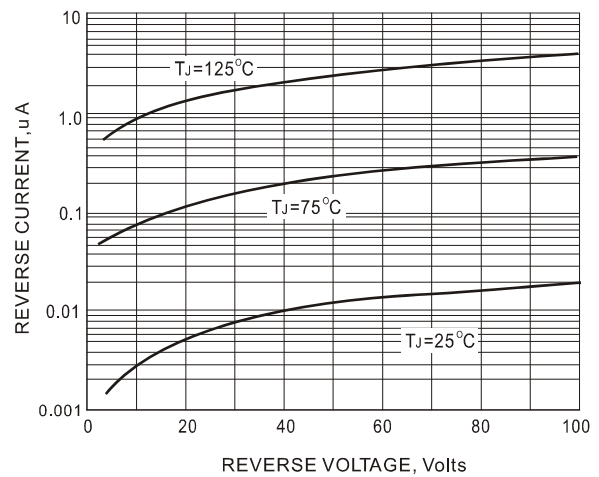


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

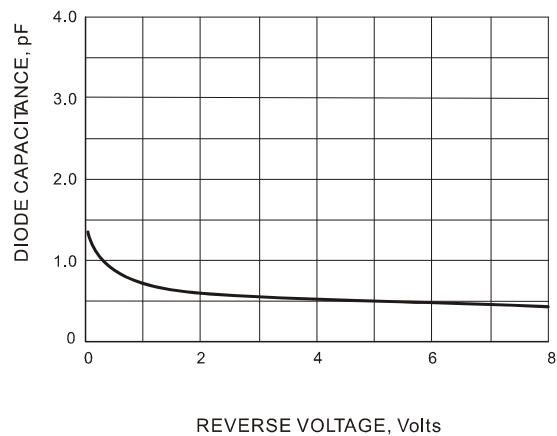


FIG. 3 TYPICAL JUNCTION CAPACITANCE

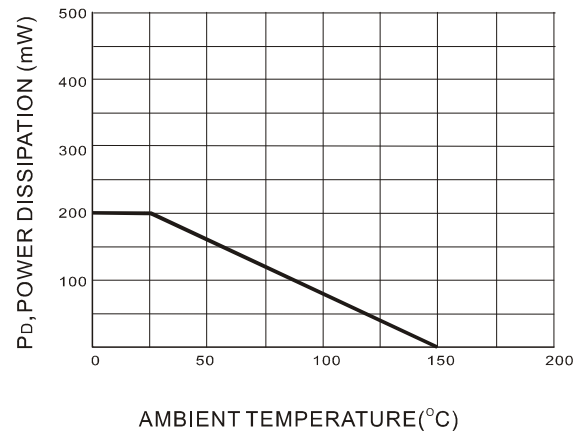
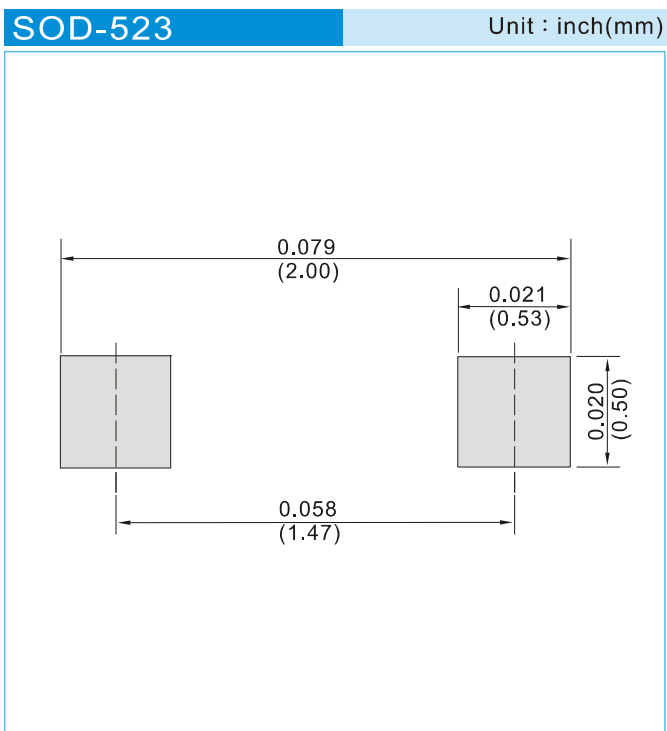


FIG. 4 POWER DERATING CURVE

MMBD4148TS

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 5K per 7" plastic Reel

MMBD4148TS

Part No_packing code_Version

MMBD4148TS_R1_00001

MMBD4148TS_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

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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