

MMBD4148TS

SURFACE MOUNT SWITCHING DIODES

VOLTAGE	100 Volts	POWER	200mWatts
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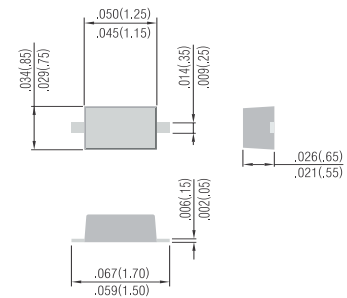
FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- Surface Mount Package Ideally Suited for Automatic Insertion.
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

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

SOD-523 Unit: inch (mm)



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

PARAMETER	SYMBOL	MMBD4148TS	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}	2	A
Power Dissipation Derate Above 25 °C	P _{TOT}	200	mW
Junction Temperature	T _J	125	°C
Storage Temperature Range	T _{STG}	-40 to 125	°C

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	MMBD4148TS	UNITS
Maximum Thermal Resistance	R _{θJA}	635	°C / W

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

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

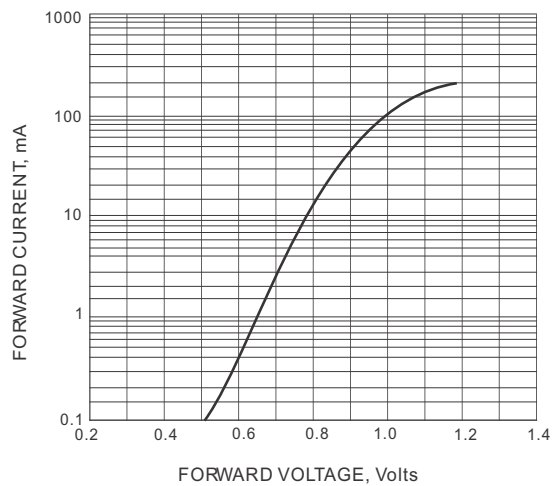


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

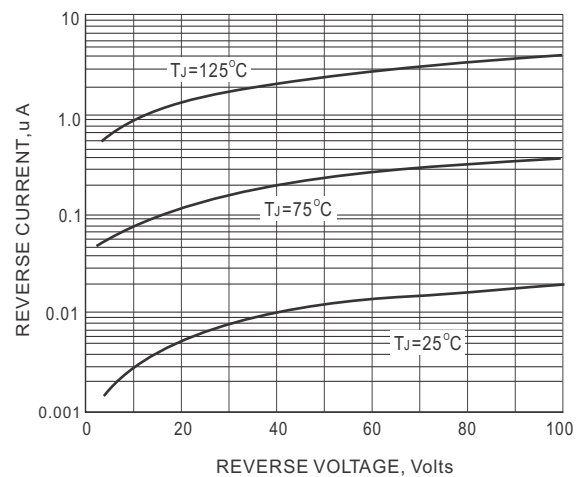


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

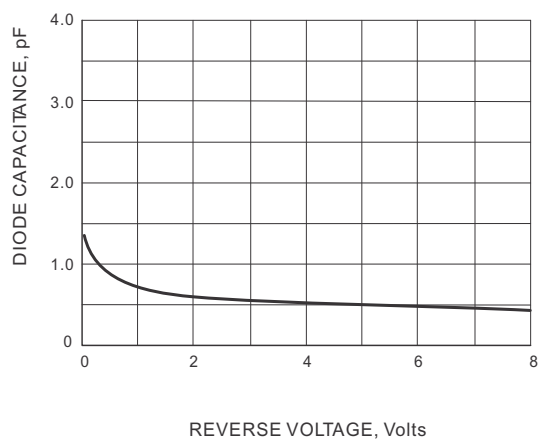


FIG. 3 TYPICAL JUNCTION CAPACITANCE

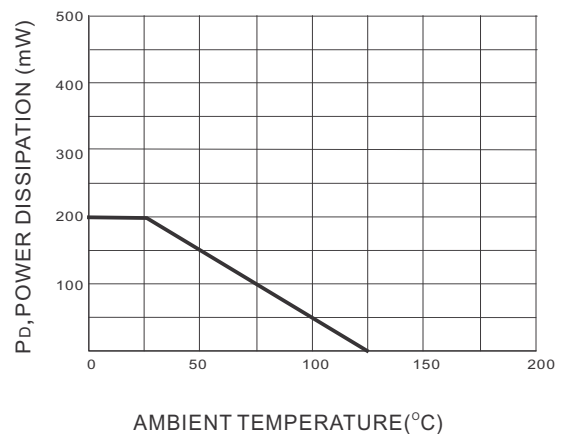


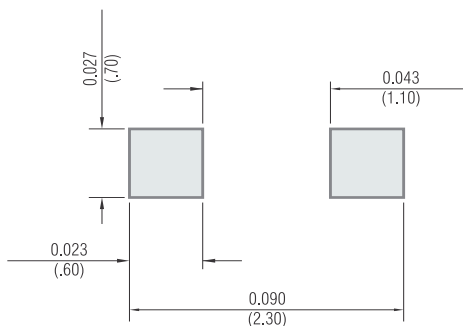
FIG. 4 POWER DERATING CURVE

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MOUNTING PAD LAYOUT

SOD-523

Unit: inch (mm)



ORDER INFORMATION

- Packing information

T/R - 12K per 13" plastic Reel

T/R - 5K per 7" plastic Reel

LEGAL STATEMENT

IMPORTANT NOTICE

This information is intended to unambiguously characterize the product in order to facilitate the customer's evaluation of the device in the application. The information will help the customer's technical experts determine that the device is compatible and interchangeable with similar devices made by other vendors. The information in this data sheet is believed to be reliable and accurate. The specifications and information herein are subject to change without notice. New products and improvements in products and product characterization are constantly in process. Therefore, the factory should be consulted for the most recent information and for any special characteristics not described or specified.

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