

MMBD4148TS-G (RoHS Device)

Voltage: 100V

Power: 200mW

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.

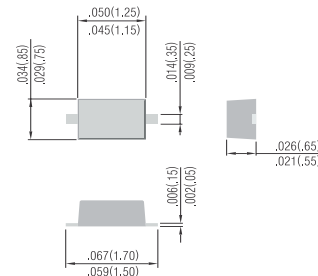
Terminals : Solderable per MIL-STD-750,Method 2026

Standard packaging: 8mm tape

Marking Code: A2



SOD-523



Unit: inch (mm)

ABSOLUTE RATINGS $(T_A = 25^\circ\text{C}$, 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 $T_A = 25^\circ\text{C}$	$I_{F(AV)}$	150	mA
Peak Forward Surge Current, 1.0 μs	I_{FSM}	2	A
Power Dissipation Derate Above 25 $^\circ\text{C}$	P_{TOT}	200	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-40 to 125	$^\circ\text{C}$

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	MMBD4148TS	UNITS
Maximum Thermal Resistance	$R_{\theta JA}$	635	$^\circ\text{C} / \text{W}$

NOTE:

1. CJ at $V_R=0$, $f=1\text{MHz}$
2. From $I_F=10\text{mA}$ to $I_R=1\text{mA}$, $V_R=6\text{Volts}$, $R_L=100\Omega$

“-G” suffix designates RoHS compliant Version

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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

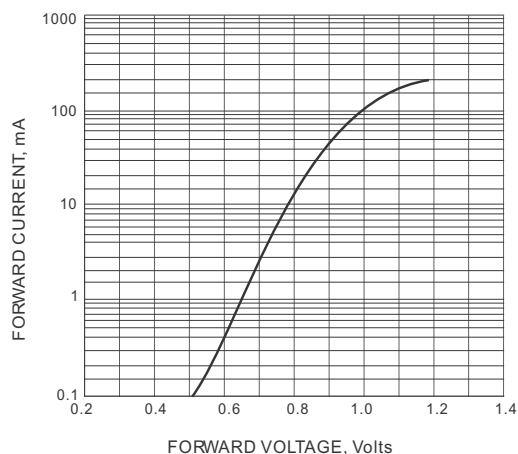


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

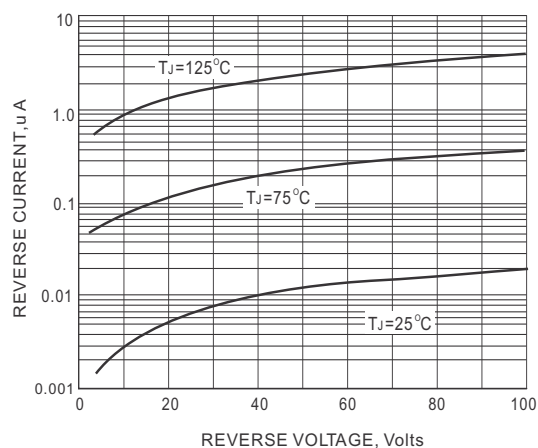


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

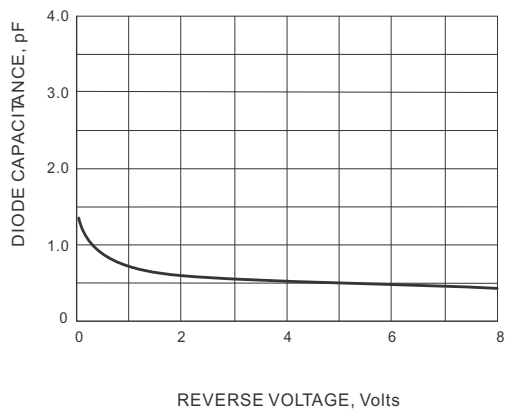


FIG. 3 TYPICAL JUNCTION CAPACITANCE

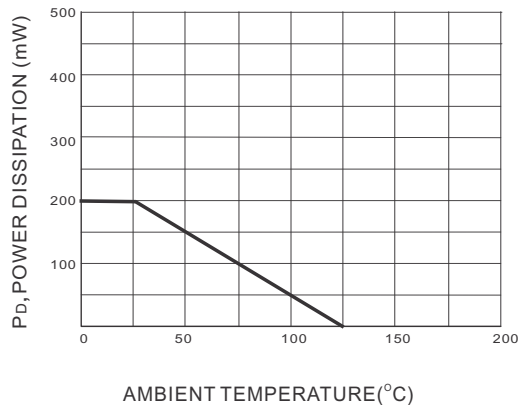


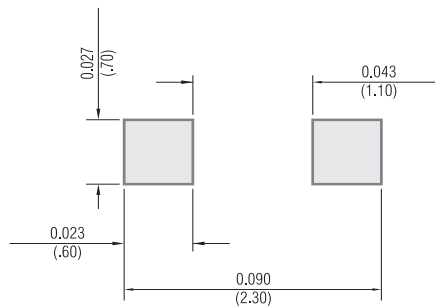
FIG. 4 POWER DERATING CURVE

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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