

MMBD4148TS!5 I

SURFACE MOUNT SWITCHING DIODES

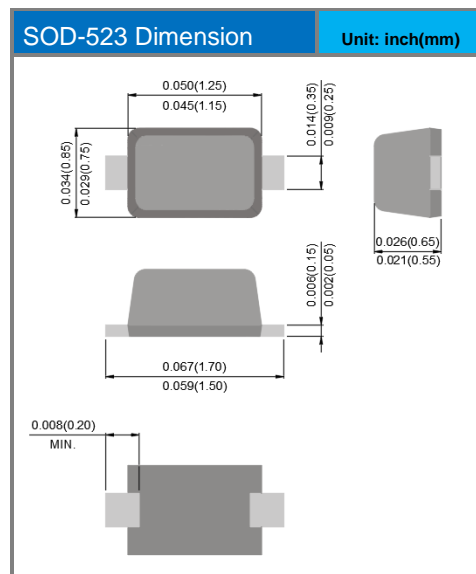
VOLTAGE	100 Volt	POWER	200mWatt
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FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- Surface Mount Package Ideally Suited for Automatic Insertion.
- AEC-Q101 qualified
- 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 : 0.00005 ounces, 0.0014 grams



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

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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

TYPICAL CHARACTERISTIC CURVES

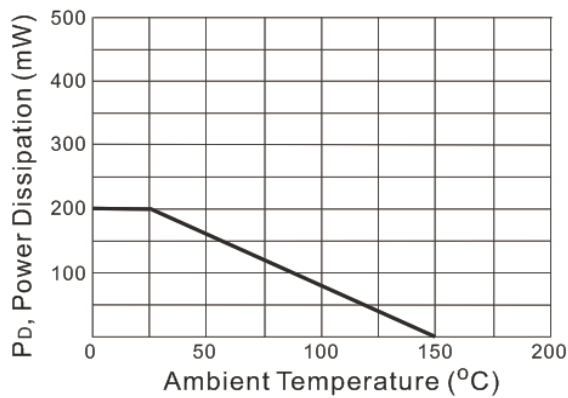


Fig.1 Power Derating Curve

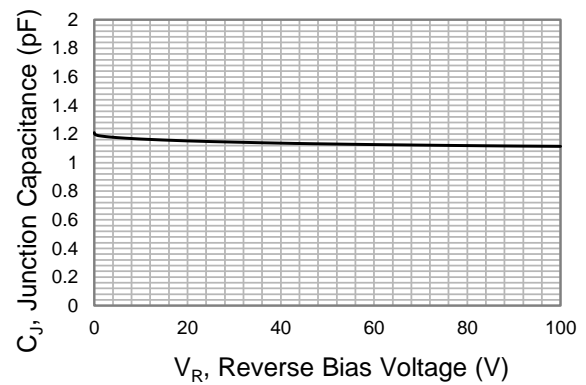


Fig.2 Typical Junction Capacitance

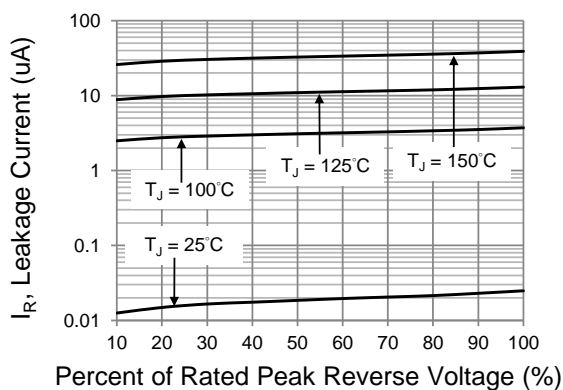


Fig.3 Typical Reverse Characteristics

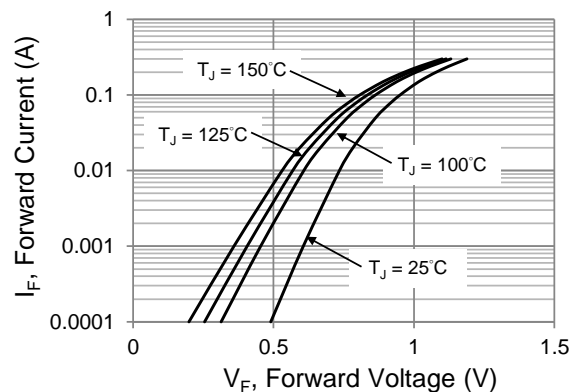


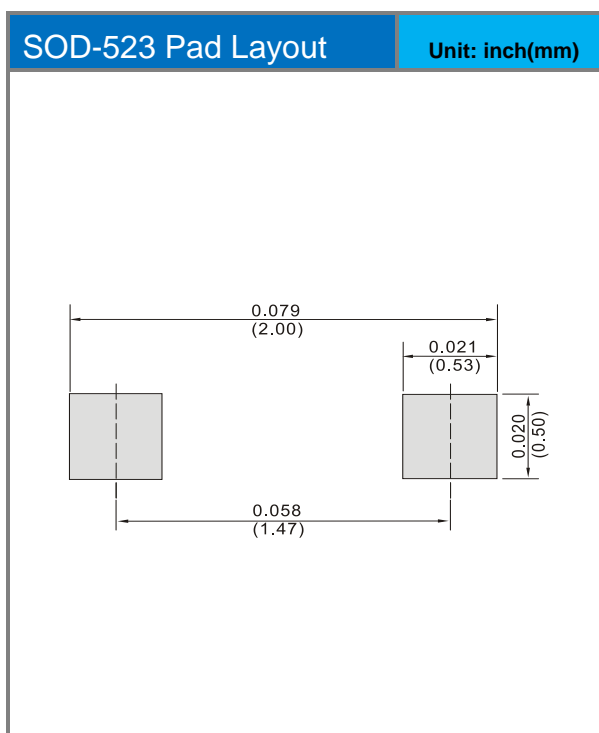
Fig.4 Typical Forward Characteristics

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
MMBD4148TS-AU	SOD-523	5K pcs / 7" reel	A2

Mounting Pad Layout



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