



MMBD4148FN2

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 200mWatts

DFN 2L Unit : Inch(mm)

FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- Surface Mount Package Ideally Suited for Automatic Insertion.
- In compliance with EU RoHS 2002/95/EC directives

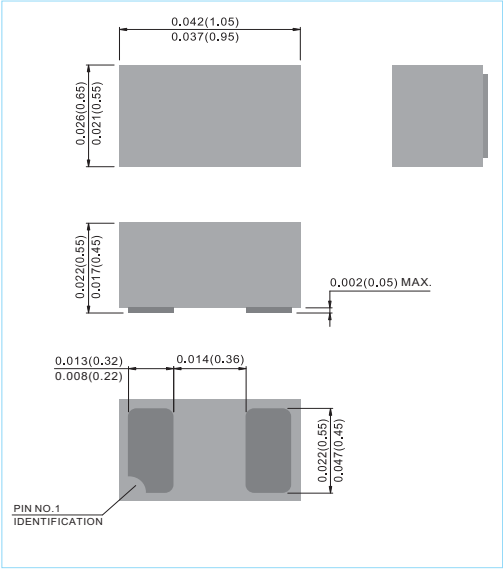
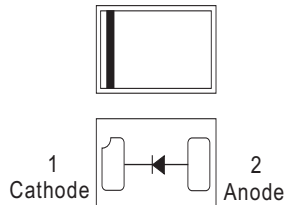
MECHANICAL DATA

Case : DFN 2L plastic case.

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

Marking Code : BD

Polarity : Color band cathode



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

PARAMETER	SYMBOL	MMBD4148FN2	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, 0.001ms	I _{FSM}	4	A
Power Dissipation Derate Above 25 °C	P _{TOT}	200	mW
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to 150	°C

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	MMBD4148FN2	UNITS
Typical Thermal Resistance	R _{θJA}	625	°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

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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

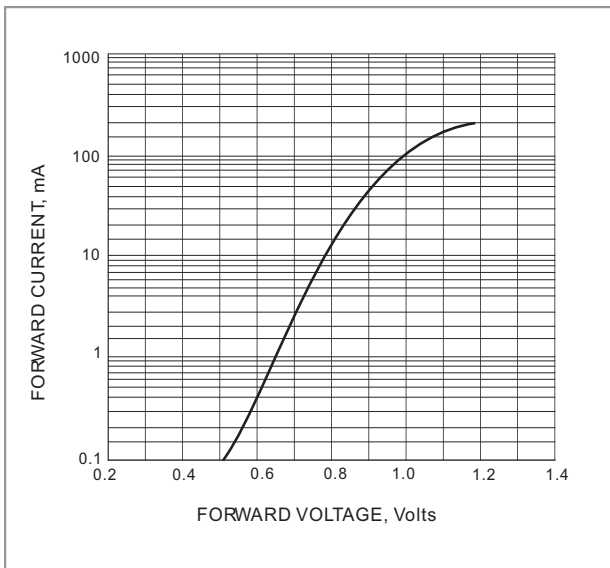


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

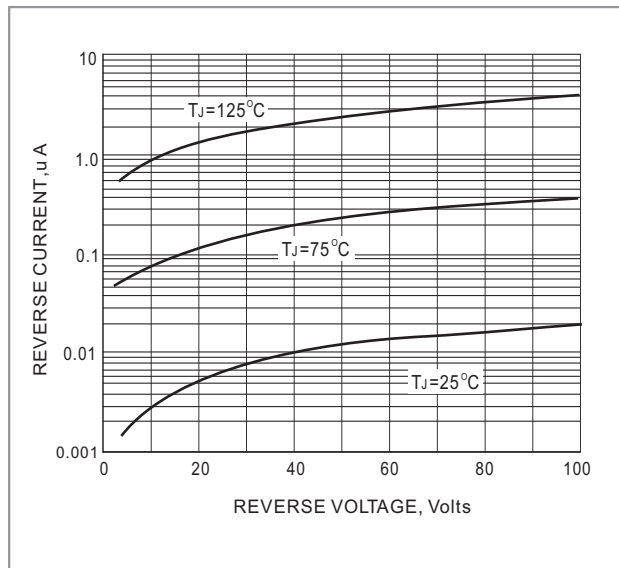


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

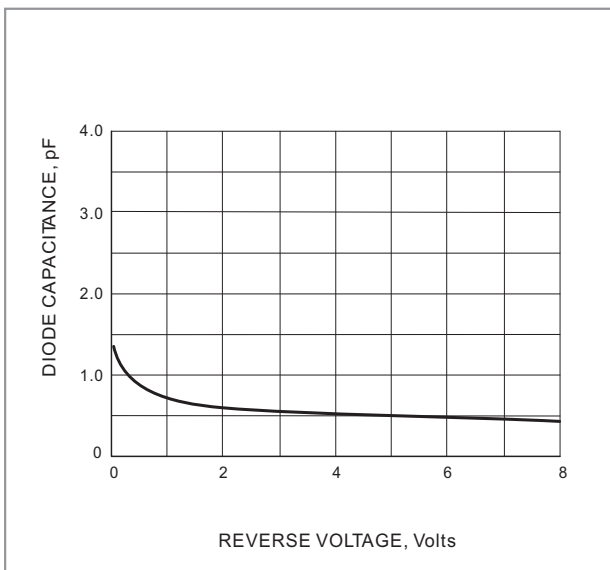


FIG. 3 TYPICAL JUNCTION CAPACITANCE

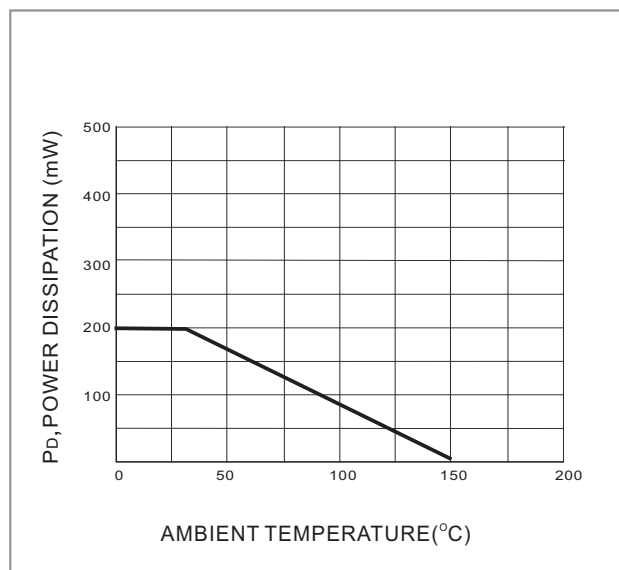
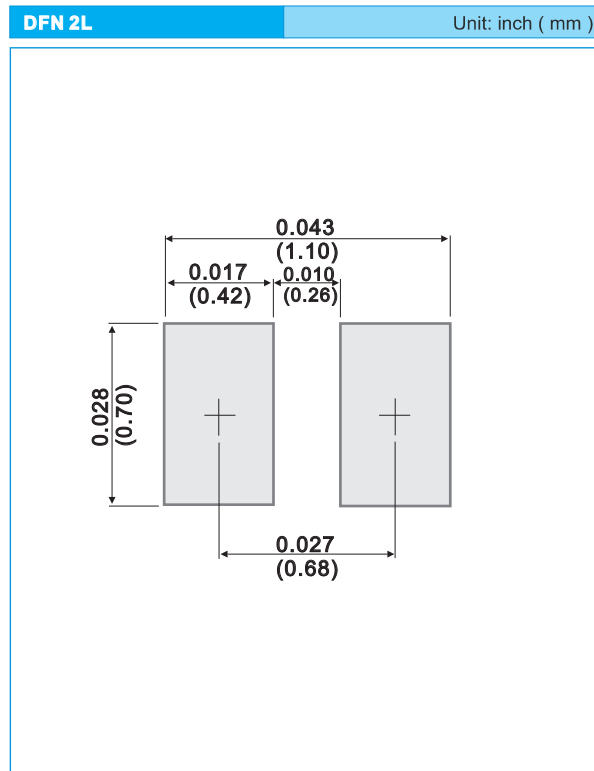


FIG. 4 POWER DERATING CURVE



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 8K per 7" plastic Reel

LEGAL STATEMENT

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