



貼片開關二極管

SOT-23 MMBD4148

SURFACE MOUNT FAST SWITCHING DIODE

FEATURE:

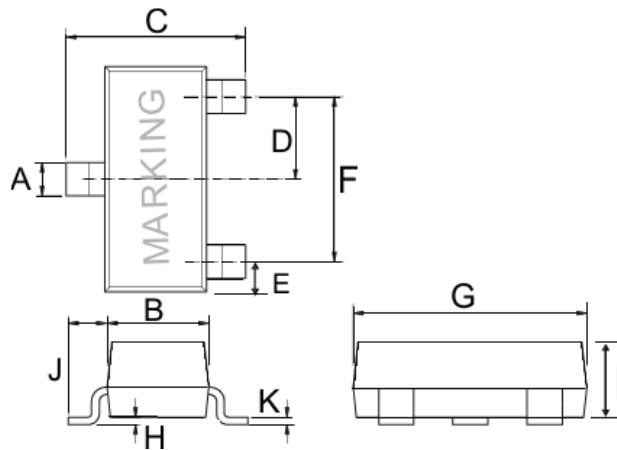
- ◆ Fast switching diode
- ◆ High Conductance
- ◆ Surface Mount Package Ideally Ssited for Automatic Insertion
- ◆ For General Purpose and Switching
- ◆ Plastic Material - UL Recognition Flammability Classification 94V-0

MECHANICAL CHARACTERISTICS:

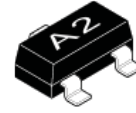
- ◆ Case: SOT-23 Molded Plastic
- ◆ Weight: 0.008 Grams (approx)
- ◆ Marking: Body top view (A2)
- ◆ Terminals: Plated leads solderable per MIL-STD-202, Method 208.
- ◆ Mounting: Position any
- ◆ Lead Free for Rohm / Lead free version and "LF" suffix to part number.

DIMENSION:

SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.19	1.4
C	2.1	2.5
D	0.89	1.05
E	0.45	0.61
F	1.78	2.05
G	2.65	3.05
H	0.013	0.15
I	0.89	1.1
J	0.45	0.61
K	0.076	0.178

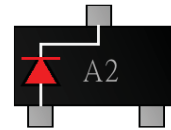


Figure



MMBD4148

Marking  
A2



Maximum Ratings and Electrical Characteristics Single Diode @T<sub>A</sub>=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Peak Repetitive Voltage	V <sub>RM</sub>	100	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	75	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	75	V
DC Blocking Voltage	V <sub>R</sub>	75	V
Forward Continuous Current (Note <sup>1</sup> )	I <sub>F</sub>	300	mA
Average Rectified Output Current (Note <sup>1</sup> )	I <sub>O</sub>	200	mA
Forward Surge Current (Note <sup>1</sup> ) @t<1.0s	I <sub>FSM</sub>	2.0	A
Power Dissipation (Note <sup>1</sup> )	P <sub>d</sub>	350	mW
Typical Thermal Resistance, Junction to Ambient Air (Note <sup>1</sup> )	R <sub>θJA</sub>	357	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65+150	°C

Note: <sup>1</sup> Device mounted on fiberglass substrate 40x40x1.5mm



□ **Maximum Ratings and Electrical Characteristics Single Diode @ $T_A=25^\circ\text{C}$  unless otherwise specified**

Characteristic	Symbol	Min.	Max.	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	----	V	@ $I_{RS} = 100\mu\text{A}$
Forward Voltage	$V_F$	----	1.0	V	@ $I_F = 10\text{mA}$
Reverse Leakage Current	$I_R$	----	2.5	$\mu\text{A}$	@ $V_R = 75\text{V}$
Junction Capacitance	$C_j$	----	2	pF	$V_R = 1.0\text{V}, f = 1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$	----	4.0	nS	$I_F=10\text{mA}$ , through $I_R=10\text{mA}$ to $I_R=1.0\text{mA}, R_L=100\Omega$

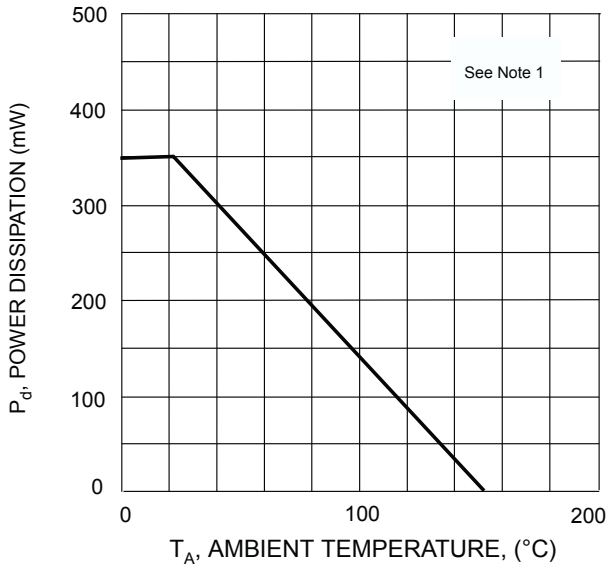


Fig. 1 Power Derating Curve

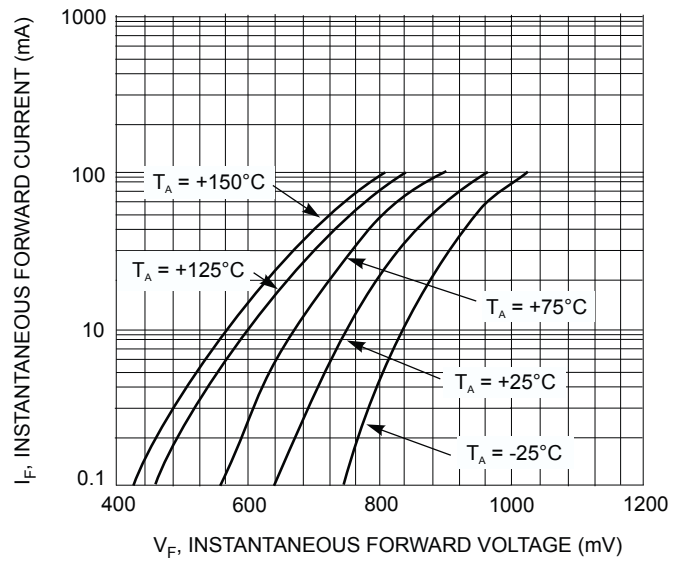


Fig. 2, Typical Forward Characteristics

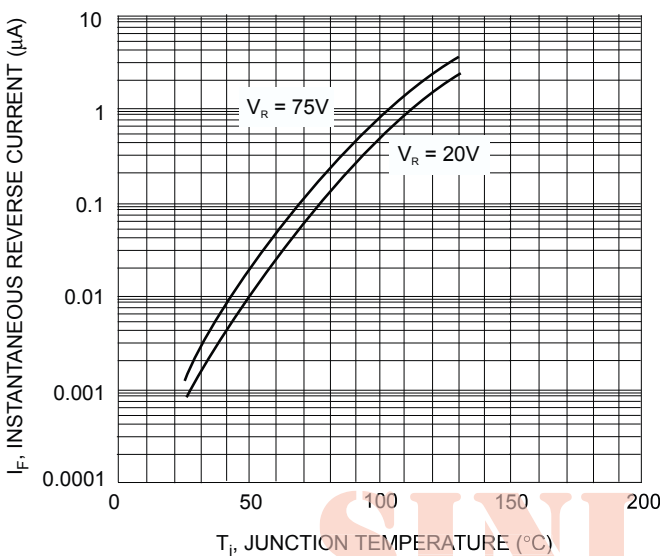
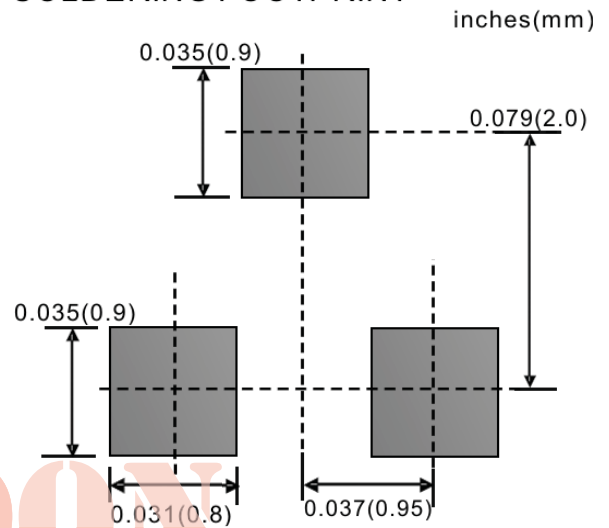


Fig. 3, Typical Reverse Characteristics

**SOLDERING FOOTPRINT**



**SINLOON®**

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**SOT-23 MMBD4148**

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COMMON PACKING INFORMATION:

Product Number:	Package Type	Packing Quantity	Carton Quantity	Apporx Gross Weight
MMBD4148 (A2)	SOT-23	3000 Tape & Reel	150,000 Ctn	10 Kg

Reel Diameter (mm)	Quantity (Pcs)	Inner Box Size (mm)	Carton Size (mm)
178	3000	L: 187 x W:187 x H: 65	L:390 x W:240 x H:420

PACKAGE

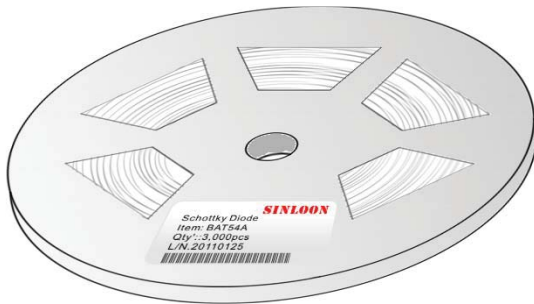


Fig-1

Inner Box: Fig-2



Fig-2

Carton Pack Fig-3



Fig-3

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Mayloon characteristic parameters of electronic product specification changes or updates without prior notice.

