

MMBD4148

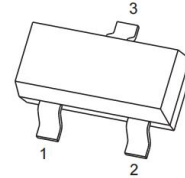
Switching Diode

FEATURE

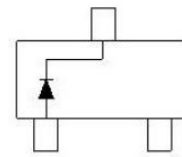
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Low Current Leakage
- Small Outline Surface Mount Package
- RoHS compliant / Green EMC

MARKING: KA2

SOT-23



Schematic diagram



ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

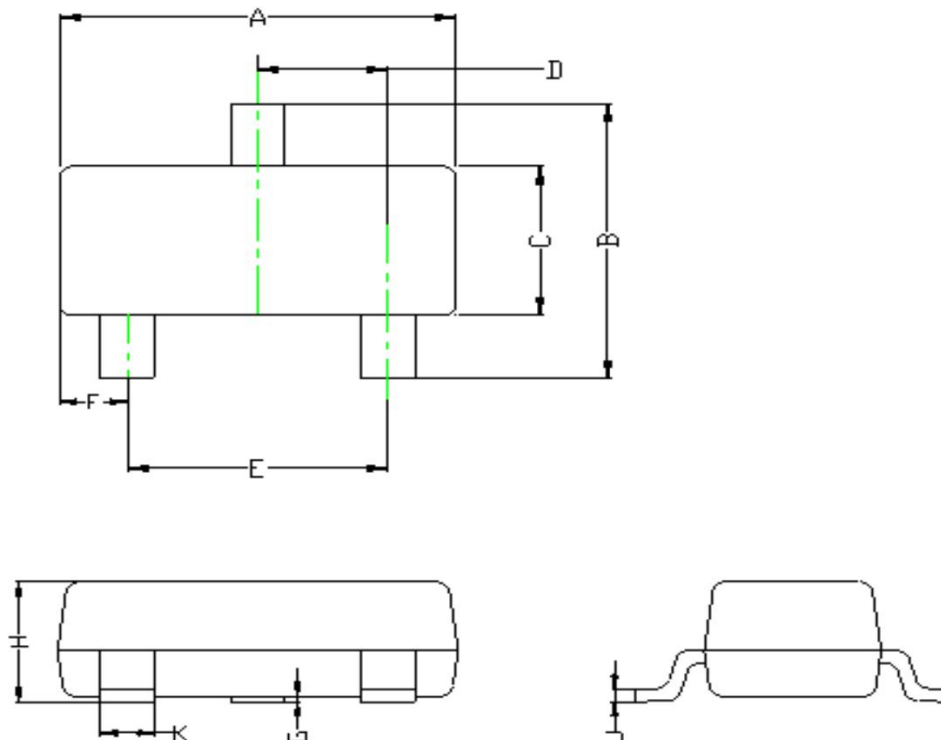
Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Average Rectified Current	I_O	150	mA
Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
NON-Repetitive Peak Forward Surge Current (@ $t=1\text{S}$.)	I_{FSM}	1	A
Forward DC Current	I_F	200	mA
Storage Temperature	T_{stg}	-55 to 155	$^{\circ}\text{C}$
Thermal Resistance	R_{th}	555	$^{\circ}\text{C}/\text{W}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Forward Voltage	V_F	$I_F=10\text{mA}$			1.0	V
Reverse breakdown voltage	V_R	$I_R=100\mu\text{A}$	75			V
Reverse voltage leakage current	I_R	$V_R=20\text{V}$			25	nA
Dynamic Forward Resistance	r_f	I_F	5			Ω
Typical Junction Capacitance	C_J	$V_R=0\text{V}$, $f=1.0\text{MHz}$			5	pF
Reverse recovery time	T_{rr}	$I_F=10\text{mA}$, $V_R=6\text{V}$, $R_L=100\Omega$			4	nS

SOT-23 Package Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
MMBD4148	SOT23	Tape & Reel 3000pcs/7"Reel	8mm	4mm	Conductive	



Symbol	Dimensions In Millimeters		
	Min	Typ	Max
A	2.800	-	3.040
B	2.100	-	2.640
C	1.200	-	1-400
D	0.890	-	1.030
E	1.780	-	2.050
F	0.450	-	0.600
G	0.013	-	0.100
H	0.900	-	1.110
J	0.090	-	0.180
K	0.370	-	0.510
L	0.300	-	0.500

1.Unit mm