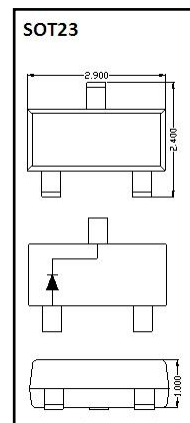


DATA SHEET

MMBD4148

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

Device Marking Code	
MMBD4148	KA2



MAXIMUM RATINGS (Ta = 25 °C)

Symbol	Parameter	Value	Units
V _R	Reverse Voltage	75	V
V _{RM}	Peak Reverse Voltage	100	V
I _O	Average Rectified Current	150	mA
P _{tot}	Power Dissipation	350	mW
T _J	Junction Temperature	150	°C
I _{FSM}	NON-Repetitive Peak Forward Surge Current (@t=1S.)	1	A
I _F	Forward DC Current	200	mA
T _{stg}	Storage Temperature	-55 to 155	°C
R _{th}	Thermal Resistance	555	°C/W

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Symbol	Parameter	Test Conditions	Min	Max	Units
V _F	Forward Voltage	I _F =10mA		1.0	V
V _R	Reverse breakdown voltage	I _R =100uA	75		V
I _R	Reverse voltage leakage current	V _R =20V		25	nA
r _f	Dynamic Forward Resistance	I _F	5		Ω
C _J	Typical Junction Capacitance	V _R =0V, f=1.0MHz		5	pF
T _{rr}	Reverse recovery time	I _F =10mA, V _R =6V R _L =100Ω		4	nS

ORDERING INFORMATION

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

PACKAGE DIMENSIONS

Package Outline : SOT23

The diagram illustrates the SOT23 package outline in three views: top, side, and cross-sectional. The top view shows a rectangular package with a central notch. Dimensions A, B, C, D, E, and F are indicated. The side view shows the package height H and the lead length J. The cross-sectional view shows the lead thickness K and the package height H. The package is shown in a perspective view, highlighting its three-dimensional structure.

SOT23 Package Outline

Symbol	Dimensions in mm	
	Min.	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

Note:

1. Halogen free ,EMC
2. Pb free solder
3. Lead thickness solder plating
4. Lead frame CAC-5
5. Other Tolerance ± 0.05
6. Dimensions are exclusive of Burrs Mold Flash and Tie Bar extrusions
7. Unit :mm

SOT23 Package Outline

NOTICE

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