



FUKUCOM COMPANY LTD.

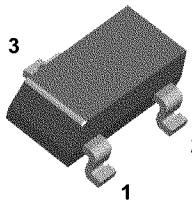
福靈有限公司

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FAIRCHILD
SEMICONDUCTOR®

MMBD4148 / SE / CC / CA

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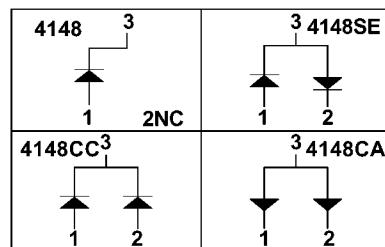


SOT-23



MARKING
 MMBD4148 5H MMBD4148CA D6
 MMBD4148CC D5 MMBD4148SE D4

Connection Diagrams



Small Signal Diodes

Absolute Maximum Ratings*

 $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 2.0	A A
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_J	Operating Junction Temperature	150	°C

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 150 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	350	mW
R_{QJA}	Thermal Resistance, Junction to Ambient	357	°C/W

Electrical Characteristics

 $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
V_R	Breakdown Voltage	$I_R = 5.0 \mu\text{A}$ $I_R = 100 \mu\text{A}$	75 100		V V
V_F	Forward Voltage	$I_F = 10 \text{ mA}$		1.0	V
I_R	Reverse Current	$V_R = 20 \text{ V}$ $V_R = 20 \text{ V}, T_A = 150^\circ\text{C}$ $V_R = 75 \text{ V}$		25 50 5.0	nA μA μA
C_T	Total Capacitance	$V_R = 0, f = 1.0 \text{ MHz}$		4.0	pF
t_{rr}	Reverse Recovery Time	$I_F = 10 \text{ mA}, V_R = 6.0 \text{ V}$, $I_{RR} = 1.0 \text{ mA}, R_L = 100 \Omega$		4.0	ns