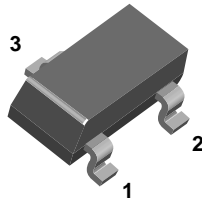
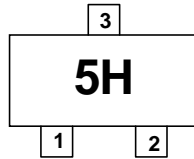


MMBD4148 / SE / CC / CA



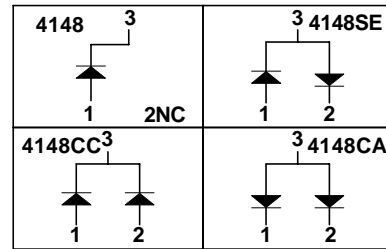
SOT-23



MARKING

MMBD4148 5H MMBD4148CA D6
MMBD4148CC D5 MMBD4148SE D4

Connection Diagrams



Small Signal Diodes

Absolute Maximum Ratings* T_A = 25°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 _{θJA}	Thermal Resistance, Junction to Ambient	357	°C/W

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
V _R	Breakdown Voltage	I _R = 5.0 μA	75		V
		I _R = 100 μA	100		V
V _F	Forward Voltage	I _F = 10 mA		1.0	V
I _R	Reverse Current	V _R = 20 V		25	nA
		V _R = 20 V, T _A = 150°C		50	μA
		V _R = 75 V		5.0	μA
C _T	Total Capacitance	V _R = 0, f = 1.0 MHz		4.0	pF
t _{rr}	Reverse Recovery Time	I _F = 10 mA, V _R = 6.0 V, I _{RR} = 1.0 mA, R _L = 100 Ω		4.0	ns

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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