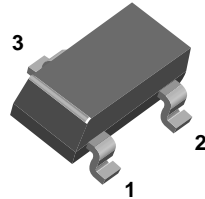
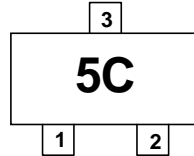


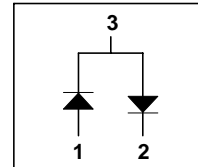
MMBD7000



SOT-23



Connection Diagram



Small signal Diode

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	A
		2.0	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 = 100 μA	100		V
V _F	Forward Voltage	I _F = 1.0 mA	550	700	mV
		I _F = 10 mA	670	820	mV
		I _F = 100 mA	0.75	1.1	V
I _R	Reverse Current	V _R = 100 V		500	nA
		V _R = 50 V		300	nA
		V _R = 50 V, T _A = 125°C		100	μA
C _T	Total Capacitance	V _R = 0, f = 1.0 MHz		1.5	pF
t _{rr}	Reverse Recovery Time	I _F = I _R = 10 mA, I _{RR} = 1.0 mA, R _L = 100 Ω		4.0	ns

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Definition of Terms

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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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