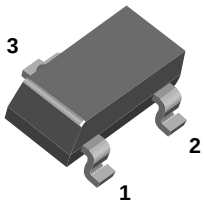
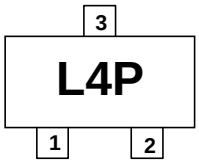
FAIRCHILD
SEMICONDUCTOR®

BAT54/A/C/S

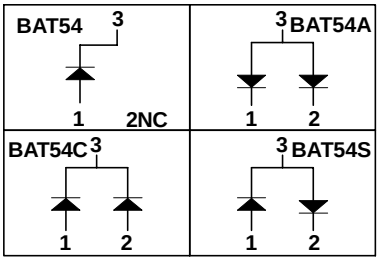


SOT-23



MARKING
BAT54 = L4P BAT54A = L42
BAT54C = L43 BAT54S = L44

Connection DiagramS



Schottky Diodes

Absolute Maximum Ratings* T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	30	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current Pulse width = 1.0 second	600	mA
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.

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	290	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	430	°C/W

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
V_R	Breakdown Voltage	I_R = 10 μA	30		V
V_F	Forward Voltage	I_F = 0.1 mA		240	mV
		I_F = 1 mA		320	mV
		I_F = 10 mA		400	mV
		I_F = 30 mA		500	mV
		I_F = 100 mA		1.0	V
I_R	Reverse Current	V_R =25 V		2	μA
C_T	Total Capacitance	V_R = 1V, f = 1.0 MHz		10	pf
t_{rr}	Reverse Recovery Time	I_F = I_R = 10 mA, I_{RR} = 1.0 mA, R_L = 100Ω		5.0	ns

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DOME™	HiSeC™	PowerTrench®	SuperSOT™-8	
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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.

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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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