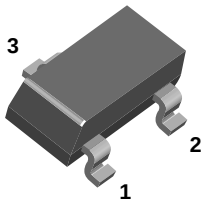
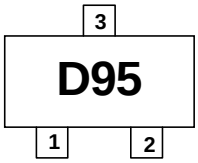
FAIRCHILD
SEMICONDUCTOR®

BAR43/A/C/S



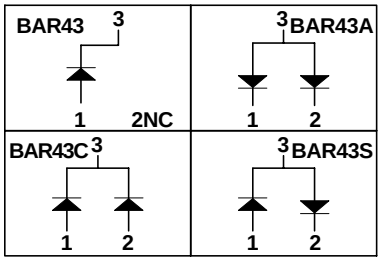
SOT-23



MARKING

BAR43	D95	BAR43A	DB1
BAR43C	DB2	BAR43S	DA5

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	750	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.

**Mounted on ceramic substrate 10mm x 8mm x 0.6mm.

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 = 100 µA	30		V
V_F	Forward Voltage	I_F = 2.0 mA I_F = 15 mA I_F = 100 mA	260	330 450 1.0	mV mV V
I_R	Reverse Current	V_R = 25 V V_R = 25 V, T_A = 100°C		0.5 100	µA µA
t_{rr}	Reverse Recovery Time	I_F = I_R = 10 mA, I_{RR} = 1.0 mA, R_L = 100 Ω		5.0	ns
	Minimum Detection Recovery Time I_F = I_R = 10 mA, I_{RR} = 1.0 mA, R_L = 100 Ω			80%	

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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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