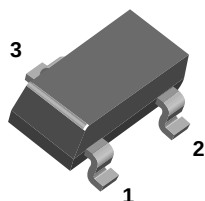


BAR43/A/C/S

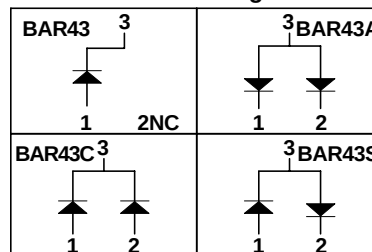


SOT-23



MARKING
BAR43 D95 BAR43A DB1
BAR43C DB2 BAR43S DA5

Connection Diagrams



Schottky Diodes

Absolute Maximum Ratings* $T_A = 25^\circ\text{C}$ 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	$^\circ\text{C}$
T_J	Operating Junction Temperature	150	$^\circ\text{C}$

*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	$^\circ\text{C/W}$

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

Symbol	Parameter	Test Conditions	Min	Max	Units
V_R	Breakdown Voltage	$I_R = 100 \mu\text{A}$	30		V
V_F	Forward Voltage	$I_F = 2.0 \text{ mA}$ $I_F = 15 \text{ mA}$ $I_F = 100 \text{ mA}$	260	330 450 1.0	mV mV V
I_R	Reverse Current	$V_R = 25 \text{ V}$ $V_R = 25 \text{ V}, T_A = 100^\circ\text{C}$		0.5 100	μA μA
t_{rr}	Reverse Recovery Time	$I_F = I_R = 10 \text{ mA}, I_{RR} = 1.0 \text{ mA},$ $R_L = 100 \Omega$		5.0	ns
	Minimum Detection Recovery Time	$I_F = I_R = 10 \text{ mA}, I_{RR} = 1.0 \text{ mA},$ $R_L = 100 \Omega$		80%	

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DenseTrench™	GTO™	Power247™	SuperSOT™-6	
DOME™	HiSeC™	PowerTrench®	SuperSOT™-8	
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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
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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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