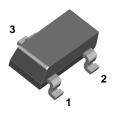
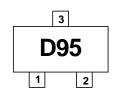


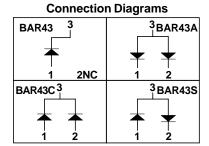
# **BAR43/A/C/S**



**SOT-23** 



MARKING
BAR43 D95 BAR43A DB1
BAR43C DB2 BAR43S DA5



# **Schottky Diodes**

**Absolute Maximum Ratings\*** T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	30	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	200	mA
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second	750	mA
T <sub>stg</sub>	Storage Temperature Range	-55 to +150	°C
T <sub>J</sub>	Operating Junction Temperature	150	°C

<sup>\*</sup>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<sub>4</sub> = 25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
$V_R$	Breakdown Voltage	$I_R = 100 \mu A$	30		V
V <sub>F</sub>	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 <sub>R</sub>	Reverse Current	V <sub>R</sub> = 25 V V <sub>R</sub> = 25 V, T <sub>A</sub> = 100°C		0.5 100	μA μA
t <sub>rr</sub>	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 $I_F = I_R = 10$ mA, $I_{RR} = 1.0$ mA, $I_{RR} = 1.0$ mA, $I_{RR} = 1.0$ mA,			80%	

<sup>\*\*</sup>Mounted on ceramic substrate 10mm x 8mm x 0.6mm.

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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.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

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