

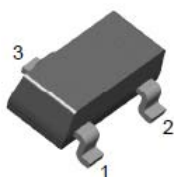


THE DATASHEET OF BAR43S

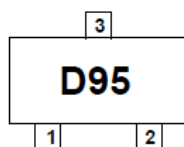


BAR43/A/C/S

Schottky Rectifiers



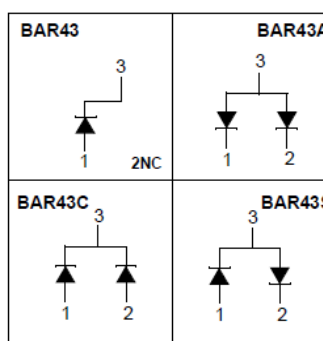
SOT-23



MARKING

BAR43 D95 BAR43A DB1
BAR43C DB2 BAR43S DA5

Connection Diagram



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 Current Pulse Width = 1.0 second	750	mA
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_{Jmax}	Operating Junction Temperature	150	$^\circ\text{C}$

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

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

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 0.8	mV mV V
I_R	Reverse Leakage	$V_R = 25\text{V}$ $V_R = 25\text{V}, T_a=100^\circ\text{C}$		0.5 100	μA
t_{rr}	Reverse Recovery Time	$I_F = I_R = 100\text{mA}, I_{RR} = 1.0\text{mA}$ $R_L = 100\Omega$		5.0	ns
	Minimum Detection Recovery Time	$I_F = I_R = 100\text{mA}, I_{RR} = 1.0\text{mA}, R_L = 100\Omega$		80%	

Typical Performance Characteristics

Figure 1. Forward Voltage vs Temperature

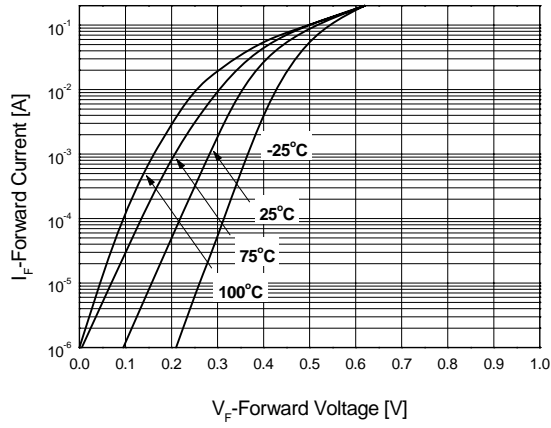


Figure 2. Reverse Leakage Current vs Temperature

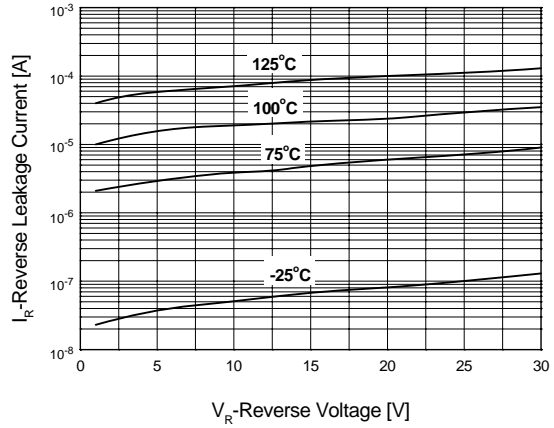
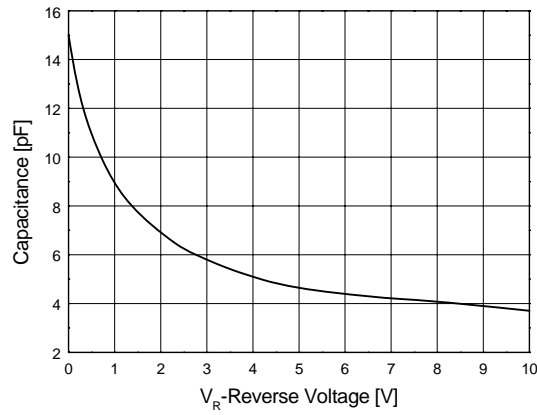








Figure 3. Capacitance vs Reverse Bias Voltage





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