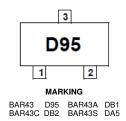


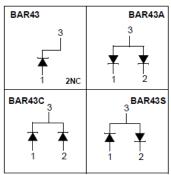
March 2009

# BAR43/A/C/S Schottky Rectifiers

# 3 P2



### **Connection Diagram**



**Absolute Maximum Ratings\***  $T_a$ =25°C unless otherwise noted

Symbol	Parameter	Value	Units V	
VRRM	Maximum Repetitive Reverse Voltage	30		
lF(AV)	Average Rectified Forward Current	200	mA	
IFSM	Non Repetitive Peak Forward Current Pulse Width = 1.0 second	750 mA		
Тѕтс	Storage Temperature Range	-55 to +150 °C		
TJmax	Operating Junction Temperature 150		°C	

<sup>\*</sup>These ratings are limiting values above which the serviceability of any semiconductor device may by impaired.

# Thermal Characteristics $T_a=25$ °C unless otherwise noted

Symbol	Parameter	Value	Units	
P <sub>D</sub>	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 <sub>R</sub>	Breakdown Voltage	$I_R = 100 \mu A$		30	V
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 2.0mA I <sub>F</sub> = 15mA I <sub>F</sub> = 100mA	260	330 450 0.8	mV mV V
I <sub>R</sub>	Reverse Leakage	V <sub>R</sub> = 25V V <sub>R</sub> = 25V, T <sub>a</sub> =100°C		0.5 100	μА
trr	Reverse Recovery Time	$\begin{aligned} &\text{IF} = \text{IR} = 100\text{mA}, &\text{IRR} = 1.0\text{mA} \\ &\text{RL} = 100\Omega \end{aligned}$		5.0	ns
	Minimum Detection Recovery Time IF = IR = 100mA, IRR = 1.0mA, RL = 100Ω			80%	

# **Typical Performance Characteristics**

Figure 1. Forward Voltage vs Temperature

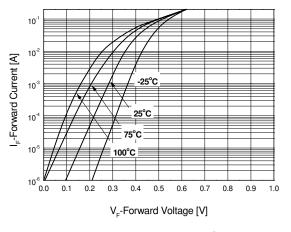


Figure 2. Reverse Leakage Current vs Temperature

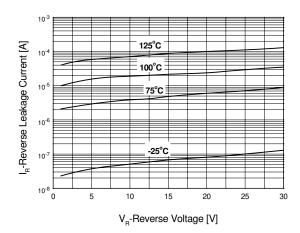
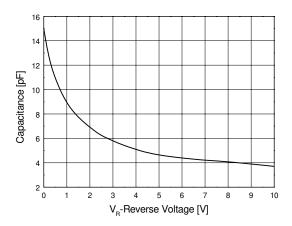


Figure 3. Capacitance vs Reverse Bias Voltage







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