

# BAR43/A/C/S

# SCHOTTKY BARRIER DIODES

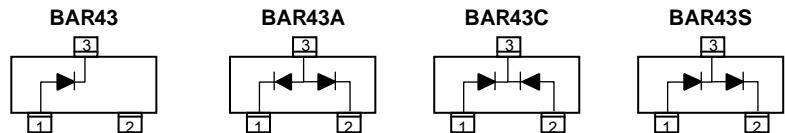
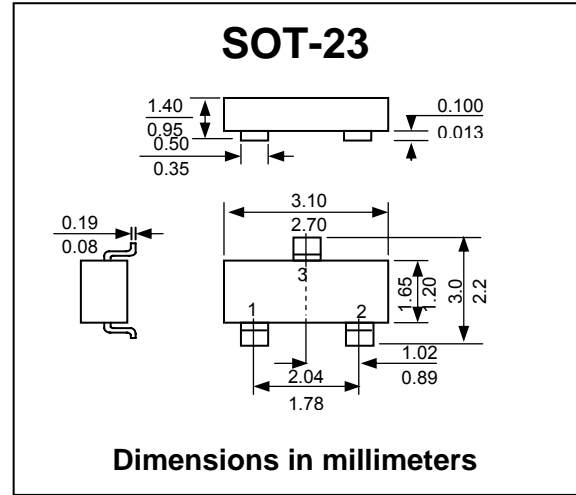
**PRV : 30 Volts**  
**Io : 200 mA**

### FEATURES :

- \* These diodes feature very low turn-on voltage
- \* Fast switching
- \* These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- \* **Pb Free/ RoHS Compliance**

### MECHANICAL DATA :

- \* Case : SOT-23 plastic Case
- \* BAR43 Marking Code : RD
- \* BAR43A Marking Code : RE
- \* BAR43C Marking Code : RF
- \* BAR43S Marking Code : RH



### ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Maximum Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current at t = 1 s	$I_{FSM}$	750	mA
Power Dissipation	$P_{tot}$	290	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	430	K/W
Operating Junction Temperature	$T_J$	-55 to +150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Test Condition	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	$I_R = 100 \mu A$	$V_{(BR)}$	30	-	V
Forward Voltage	$I_F = 2 \text{ mA}$	$V_F$	260	330	mV
	$I_F = 15 \text{ mA}$		-	450	mV
	$I_F = 100 \text{ mA}$		-	800	mV
Leakage Current	$V_R = 25 \text{ V}$	$I_R$	-	500	nA
Reverse Recovery Time	$I_F = I_R = 10 \text{ mA}$ , $I_{rr} = 1 \text{ A}$ , $R_L = 100 \Omega$	$T_{rr}$	-	5	ns

RATINGS AND CHARACTERISTIC CURVES ( BAR43/A/C/S )

FIG.1 - FORWARD CURRENT VS. FORWARD VOLTAGE

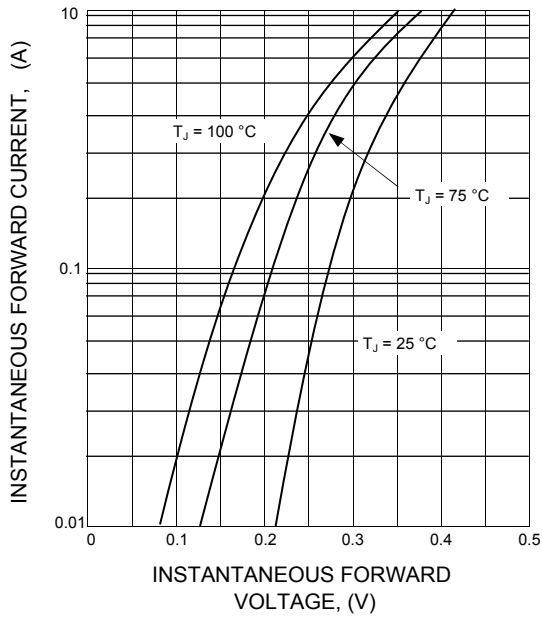


FIG.2 - REVERSE CURRENT VS. REVERSE VOLTAGE

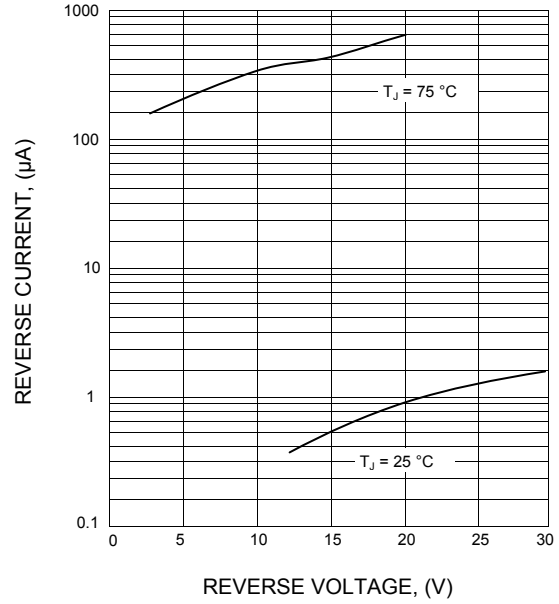


FIG.3 - DERATING CURVE

