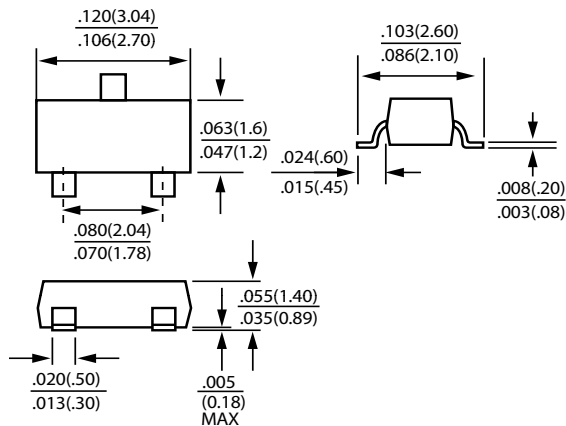
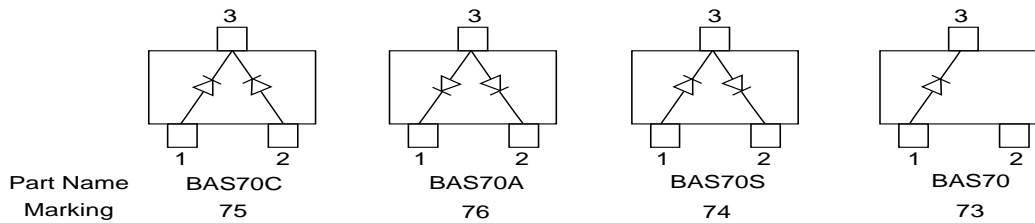


Surface Mount Schottky Barrier Diodes



SOT-23

Dimensions in inches and (millimeters)



Features

- Low Turn-on Voltage
 - Low Forward Voltage - 0.75V(Max) @ $I_F = 10 \text{ mA}$
 - Very Low Capacitance - Less Than 2.0pF @ 0V
- For high speed switching application, circuit protection

Mechanical Data

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Weight: 0.008 grams (approx.)
- Mounting Position: Any

MAXIMUM RATINGS ($T_J = 125^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	70	V
Forward Power Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C	P_F	225 1.8	Mw mW/5C
Operating Junction and Storage Temperature Range	T_J, T_{stg}	-55 ~ 150	$^\circ\text{C}$
Forward Continuous Current	I_{FM}	70	mA
Single Forward Current $t \leq 10 \text{ m}$	I_{FSM}	100	mA

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage ($I_R = 10 \text{ uA}$)	$V_{(BR)R}$	70	—	V
Total Capacitance ($V_R = 0 \text{ V}$, $f = 1.0 \text{ MHz}$)	C_T	—	2.0	pF
Reverse Leakage ($V_R = 50 \text{ V}$) ($V_R = 70 \text{ V}$)	I_R	—	0.1 10	μA
Forward Voltage ($I_F = 1.0 \text{ mA}$)	V_F	—	410	V
Forward Voltage ($I_F = 10 \text{ mA}$)	V_F	—	750	V
Forward Voltage ($I_F = 15 \text{ mA}$)	V_F	—	1.0	V

Surface Mount Schottky Barrier Diodes

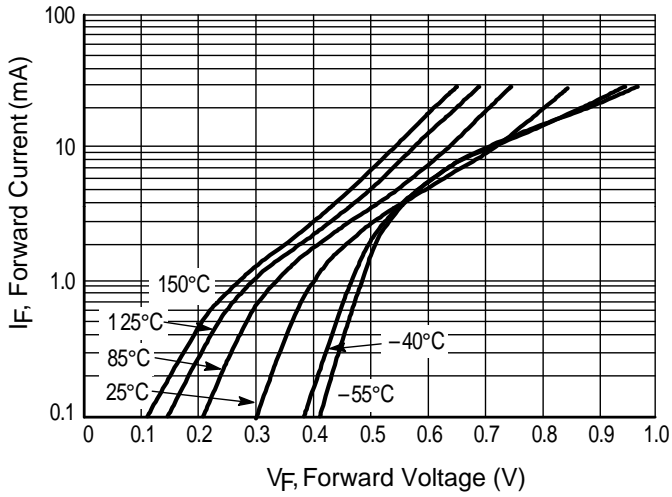


Figure 1. Typical Forward Voltage

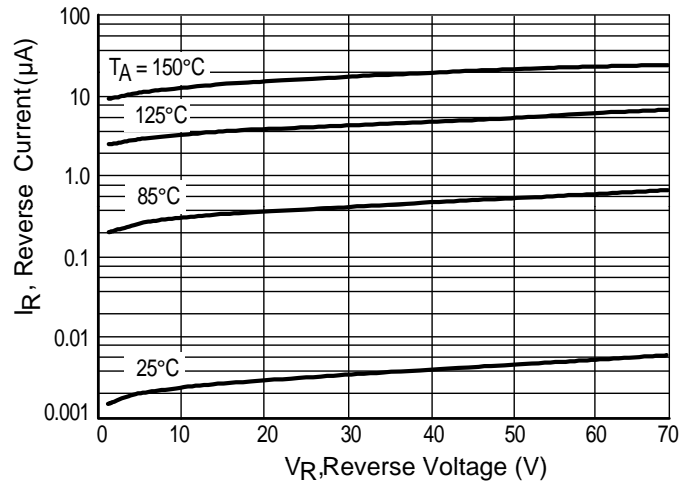


Figure 2. Reverse Current versus Reverse Voltage

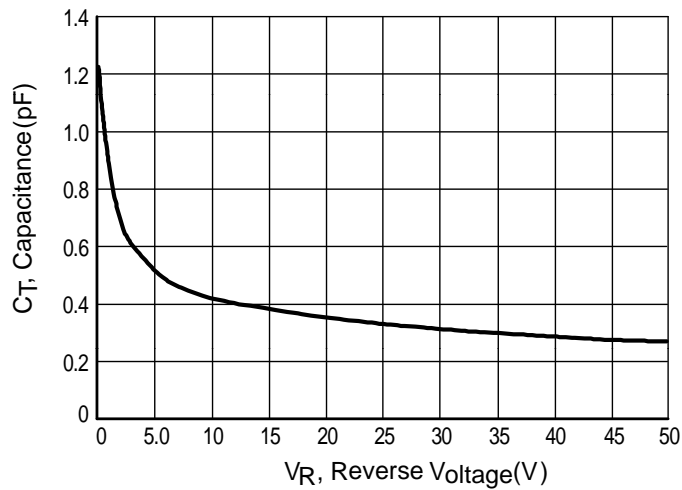


Figure 3. Typical Capacitance