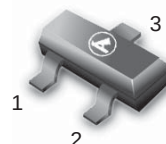


SCHOTTKY Barrier Diode

These Schottky barrier diodes are designed for high speed switching applications, circuit protection, and voltage clamping. Extremely low forward voltage reduces conduction loss. Miniature surface mount package is excellent for hand held and portable applications where space is limited.

- Extremely Fast Switching Speed
- Low Forward Voltage — 0.75 Volts (Typ) @ $I_F = 10 \text{ mAdc}$

BAS70LT1



CASE 318-08, STYLE 11
SOT-23 (TO-236AB)

* 70V SCHOTTKY BARRIER DIODES



DEVICE MARKING

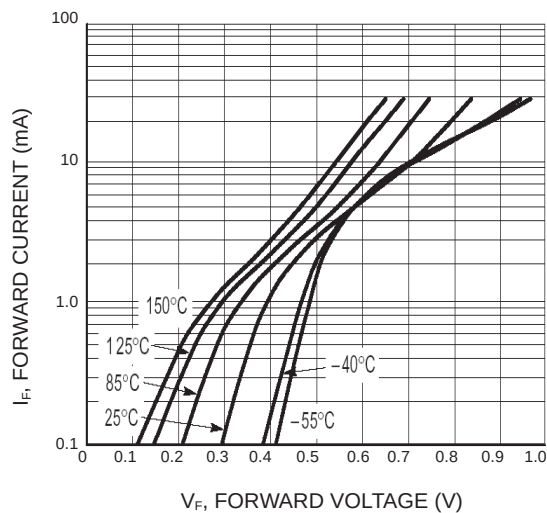
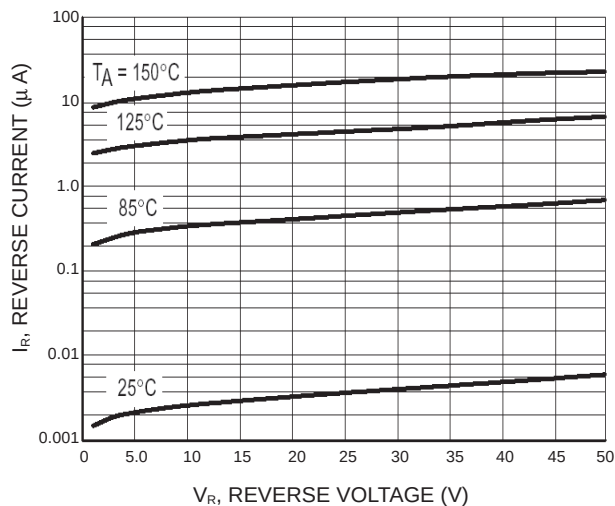
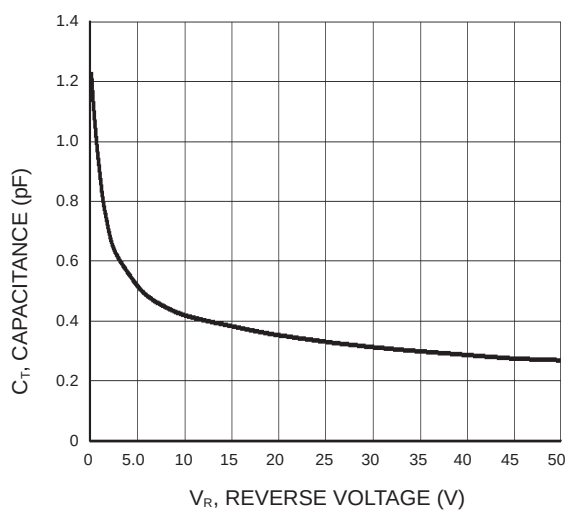
BAS70LT1= BE

MAXIMUM RATINGS ($T_J = 150^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	70	Volts
Forward Power Dissipation	P_F		
@ $T_A = 25^\circ\text{C}$		225	mW
Derate above 25°C		1.8	mW/ $^\circ\text{C}$
Operating Junction and Storage Temperature Range	T_J, T_{stg}	-55 to +150	$^\circ\text{C}$

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

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage ($I_R = 10 \mu\text{A}$)	$V_{(BR)R}$	70	—	Volts
Total Capacitance ($V_R = 1.0 \text{ V}$, $f = 1.0 \text{ MHz}$)	C_T	—	2.0	pF
Reverse Leakage ($V_R = 50 \text{ V}$)	I_R	—	0.1	μAdc
($V_R = 70 \text{ V}$)		—	10	
Forward Voltage ($I_F = 1.0 \text{ mAdc}$)	V_F	—	410	mVdc
Forward Voltage ($I_F = 10 \text{ mAdc}$)	V_F	—	750	mVdc
Forward Voltage ($I_F = 15 \text{ mAdc}$)	V_F	—	1.0	Vdc

BAS70LT1

Figure 1. Typical Forward Current

Figure 2. Reverse Current Versus Reverse Voltage

Figure 3. Typical Current