

Preliminary Information

Schottky Barrier Diodes

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.

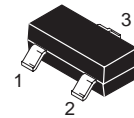
- Extremely Fast Switching Speed
- Low Forward Voltage — 0.75 Volts (Typ) @ $I_F = 10 \text{ mAdc}$



BAS70LT1

Motorola Preferred Device

**70 VOLTS
SCHOTTKY BARRIER DIODES**



**CASE 318-08, STYLE 8
SOT-23 (TO-236AB)**

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

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

DEVICE MARKING

BAS70LT1 = BE

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 ($V_R = 0 \text{ V}, f = 1.0 \text{ MHz}$)	C_T	—	2.0	pF
Reverse Leakage ($V_R = 50 \text{ V}$) ($V_R = 70 \text{ V}$)	I_R	— —	0.1 10	μAdc
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

Preferred devices are Motorola recommended choices for future use and best overall value.