

## Preliminary Information

# Dual Series Schottky Barrier Diodes

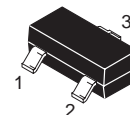
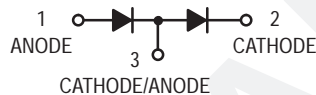
**BAS40-06LT1**

Motorola Preferred Device

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 — 0.50 Volts (Typ) @  $I_F = 10 \text{ mAdc}$

**40 VOLTS  
SCHOTTKY BARRIER DIODES**



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

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

Rating	Symbol	Value	Unit
Reverse Voltage	$V_R$	40	Volts
Forward Power Dissipation @ $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_F$	225 1.8	mW mW/ $^\circ\text{C}$
Operating Junction and Storage Temperature Range	$T_J, T_{stg}$	$-55$ to $+150$	$^\circ\text{C}$

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

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage ( $I_R = 10 \mu\text{A}$ )	$V_{(BR)R}$	40	—	Volts
Total Capacitance ( $V_R = 1.0 \text{ V}$ , $f = 1.0 \text{ MHz}$ )	$C_T$	—	5.0	pF
Reverse Leakage ( $V_R = 25 \text{ V}$ )	$I_R$	—	1.0	$\mu\text{Adc}$
Forward Voltage ( $I_F = 0.1 \text{ mAdc}$ )	$V_F$	—	380	mVdc
Forward Voltage ( $I_F = 30 \text{ mAdc}$ )	$V_F$	—	500	mVdc
Forward Voltage ( $I_F = 100 \text{ mAdc}$ )	$V_F$	—	1.0	Vdc

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