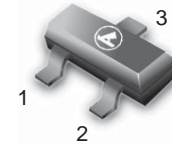


# Schottky Barrier Diode

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.

## BAS40LT1



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

\* 40V SCHOTTKY BARRIER DIODES



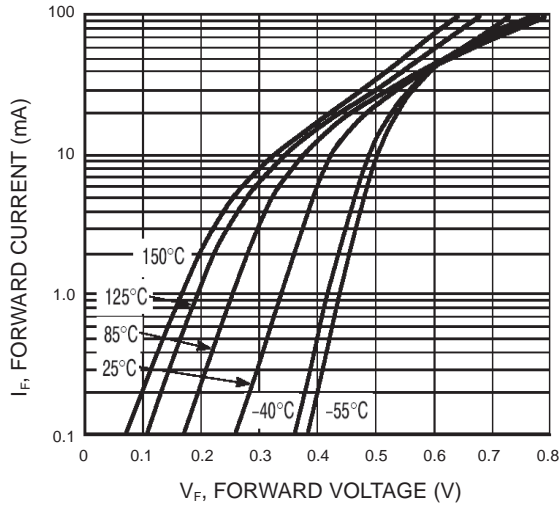
### MAXIMUM RATINGS (T<sub>J</sub> = 150°C unless otherwise noted)

Rating	Symbol	Value	Unit
Reverse Voltage	V <sub>R</sub>	40	Volts
Forward Power Dissipation @ T <sub>A</sub> = 25°C	P <sub>F</sub>	225	mW
Derate above 25°C		1.8	mW/°C
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>stg</sub>	-55 to +150	°C

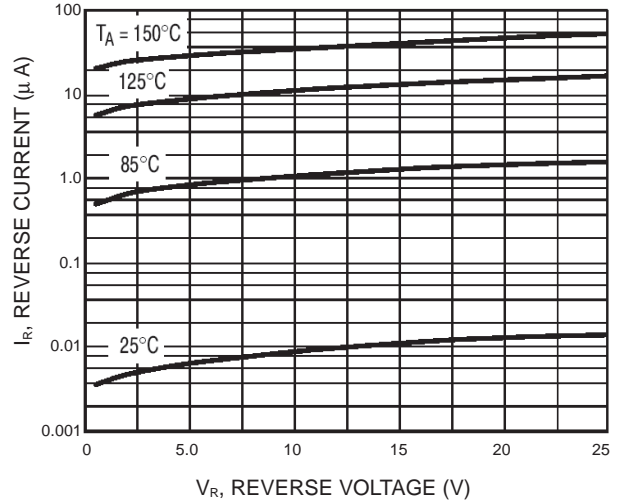
### ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage (I <sub>R</sub> = 10 μA)	V <sub>(BR)R</sub>	40	—	Volts
Total Capacitance (V <sub>R</sub> = 1.0 V, f = 1.0 MHz)	C <sub>T</sub>	—	5.0	pF
Reverse Leakage (V <sub>R</sub> = 25 V)	I <sub>R</sub>	—	1.0	μA <sub>dc</sub>
Forward Voltage (I <sub>F</sub> = 0.1 mA <sub>dc</sub> )	V <sub>F</sub>	—	380	mV <sub>dc</sub>
Forward Voltage (I <sub>F</sub> = 30 mA <sub>dc</sub> )	V <sub>F</sub>	—	500	mV <sub>dc</sub>
Forward Voltage (I <sub>F</sub> = 100 mA <sub>dc</sub> )	V <sub>F</sub>	—	1.0	V <sub>dc</sub>

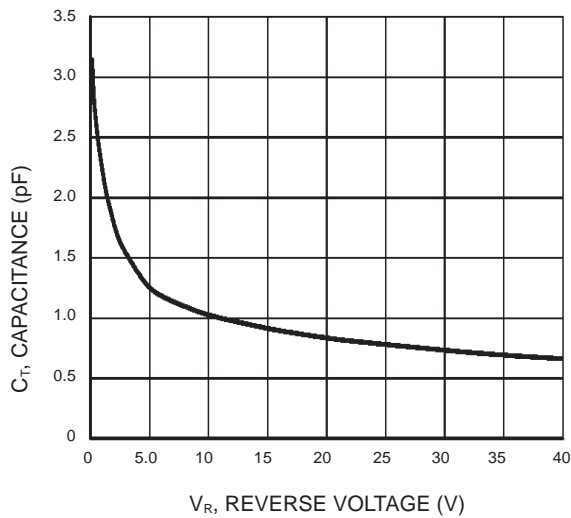
**BAS40LT1**



**Figure 1. Typical Forward Current**



**Figure 2. Reverse Current Versus Reverse Voltage**



**Figure 3. Typical Current**