

RoHS Compliant Product

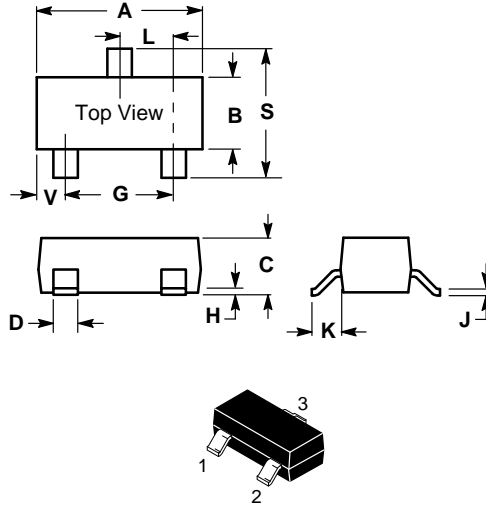
A suffix of "-C" specifies halogen & lead-free

**FEATURES**

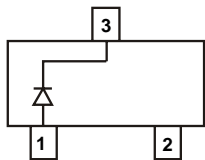
- Low Turn-on Voltage
  - Low Forward Voltage - 0.75V(Max) @  $I_F = 10 \text{ mA}$
  - Very Low Capacitance - Less Than 2.0pF @ 0V
- For high speed switching application, circuit protection

**MECHANICAL DATA**

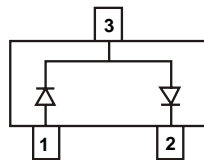
- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Weight: 0.008 grams (approx.)
- Mounting Position: Any



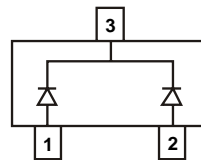
SOT-23		
Dim	Min	Max
A	2.800	3.040
B	1.200	1.400
C	0.890	1.110
D	0.370	0.500
G	1.780	2.040
H	0.013	0.100
J	0.085	0.177
K	0.450	0.600
L	0.890	1.020
S	2.100	2.500
V	0.450	0.600
All Dimension in mm		



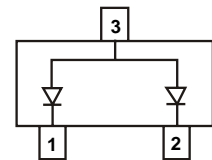
BAS70 Marking: K73, BE, 73



BAS70-04 Marking: K74, 74



BAS70-05 Marking: K75, 75



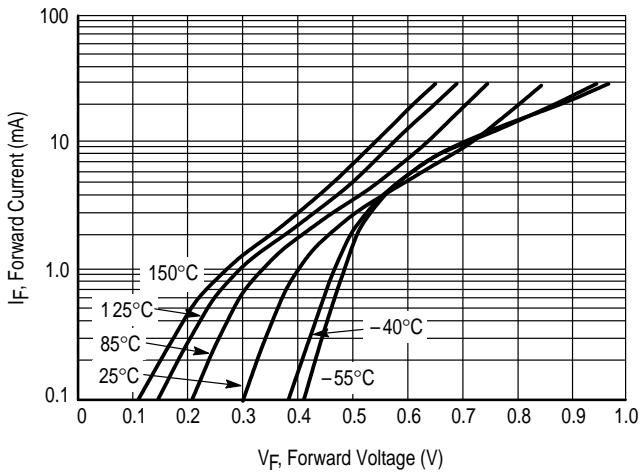
BAS70-06 Marking: K76, 76

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

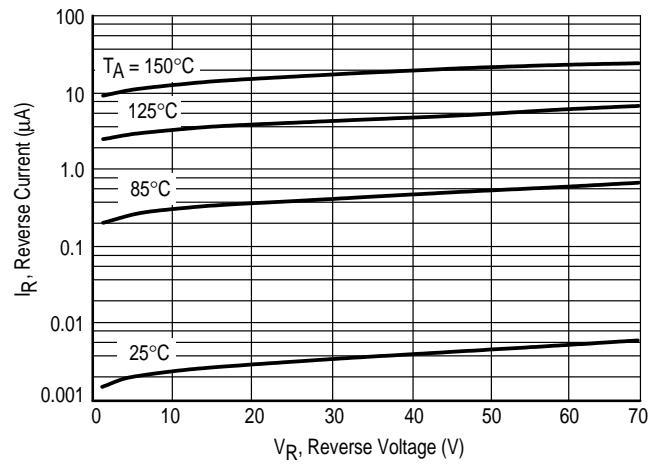
Rating	Symbol	Value	Unit
Reverse Voltage	$V_R$	70	Volts
Forward Power Dissipation @ $T_A = 25 \text{ C}$ Derate above 25 C	$P_F$	225 1.8	mW mW/5°C
Operating Junction and Storage Temperature Range	$T_J, T_{stg}$	$\pm 55$ to $+150$	5°C
Forward Continuous Current	$I_{FM}$	70	mA
Single Forward Current $t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

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

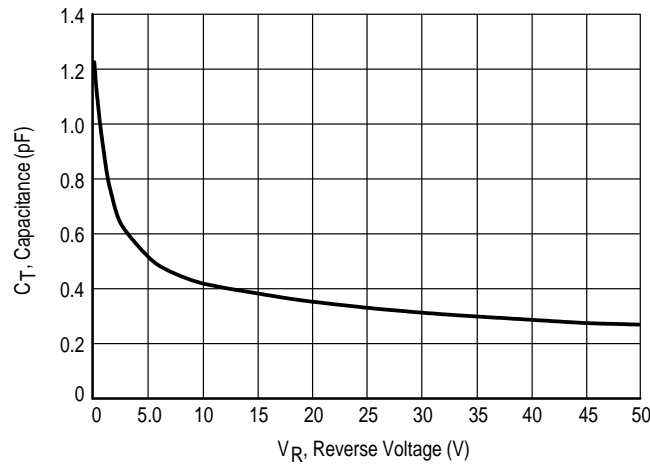
Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage ( $I_R = 10 \mu\text{A}$ )	$V_{(BR)R}$	70	—	Volts
Total Capacitance ( $V_R = 0 \text{ V}, f = 1.0 \text{ MHz}$ )	$C_T$	—	2.0	pF
Reverse Leakage ( $V_R = 50 \text{ V}$ ) ( $V_R = 70 \text{ V}$ )	$I_R$	— —	0.1 10	$\mu\text{A}_{dc}$
Forward Voltage ( $I_F = 1.0 \text{ mA}_{dc}$ )	$V_F$	—	410	mV <sub>dc</sub>
Forward Voltage ( $I_F = 10 \text{ mA}_{dc}$ )	$V_F$	—	750	mV <sub>dc</sub>
Forward Voltage ( $I_F = 15 \text{ mA}_{dc}$ )	$V_F$	—	1.0	V <sub>dc</sub>



**Figure 1. Typical Forward Voltage**



**Figure 2. Reverse Current versus Reverse Voltage**



**Figure 3. Typical Capacitance**