

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

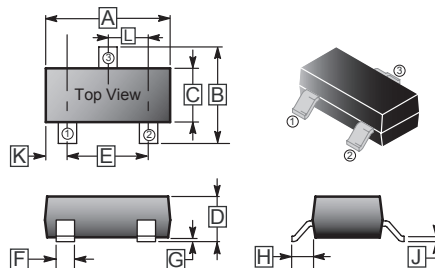
### FEATURES

- 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

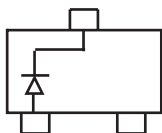
### MECHANICAL DATA

- Case: SOT-323, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Weight: 0.004 grams (approx.)
- Mounting Position: Any

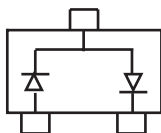
### SOT-323



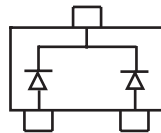
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.00	2.20	G	0.100	REF.
B	2.15	2.45	H	0.525	REF.
C	1.15	1.35	J	0.08	0.15
D	0.90	1.10	K	-	-
E	1.20	1.40	L	0.525	TYP.
F	0.20	0.40			



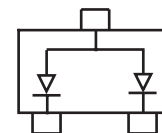
BAS70W Marking: K7C, BE



BAS70-04W Marking: K74



BAS70-05W Marking: K75



BAS70-06W Marking: K76

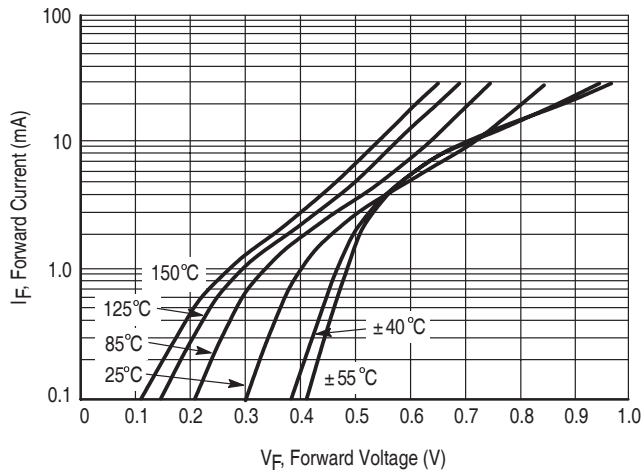
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( $T_J = 150^\circ\text{C}$ unless otherwise noted)

TYPE NUMBER	SYMBOL	VALUES	UNITS
Reverse Voltage	$V_R$	70	V
Forward Power Dissipation	$P_F$	225 Derate above 25°C	mW mW / °C
Forward Continuous Current	$I_{FM}$	70	mA
Single Forward Current	$I_{FSM}$	100	
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55~150	°C

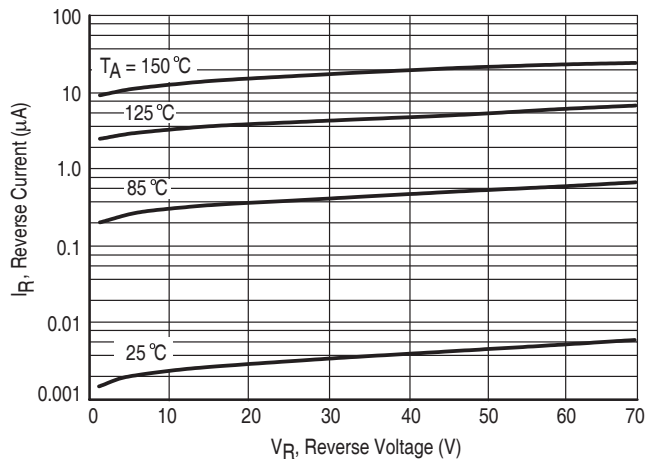
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETERS	SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 10\mu\text{A}$	70	-	V
Diode capacitance	$C_T$	$V_R = 0, f = 1\text{MHz}$	-	2.0	pF
Reverse voltage leakage current	$I_R$	$V_R = 50\text{V}$ $V_R = 70\text{V}$	-	0.1 10	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 1.0 \text{ mA}$ $I_F = 10 \text{ mA}$ $I_F = 15 \text{ mA}$	-	410 750 1000	mV

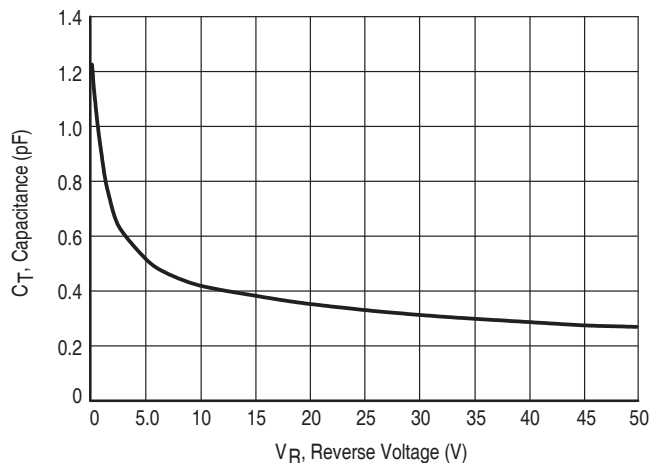
**RATINGS AND CHARACTERISTIC CURVES**



**Figure 1. Typical Forward Voltage**



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



**Figure 3. Typical Capacitance**