Elektronische Bauelemente

BAS70/-04/-05/-06

Surface Mount Schottky Barrier Diodes

RoHS Compliant Product

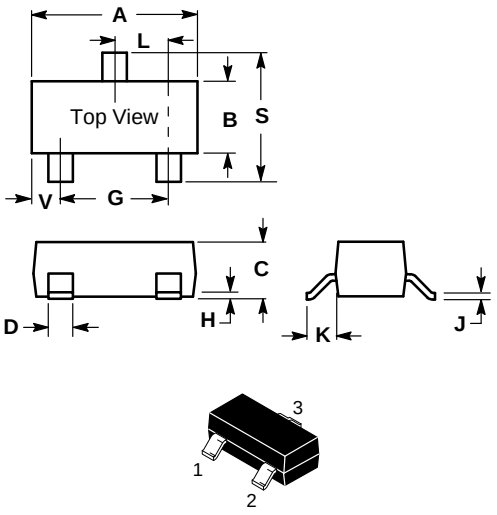
A suffix of "-C" specifies halogen & lead-free

FEATURES

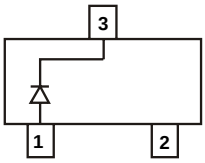
- Low Turn-on Voltage
- Low Forward Voltage - 0.75V(Max) @ I_F = 10 mA
- Very Low Capacitance - Less Than 2.0pF @ 0V
  For high speed switching application, circuit protection

MECHANICAL DATA

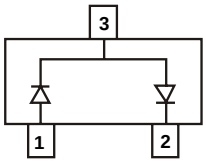
- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Weight: 0.008 grams (approx.)
- Mounting Position: Any



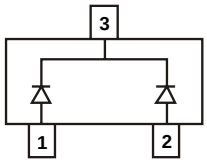
SOT-23		
Dim	**Min**	**Max**
A	2.800	3.040
B	1.200	1.400
C	0.890	1.110
D	0.370	0.500
G	1.780	2.040
H	0.013	0.100
J	0.085	0.177
K	0.450	0.600
L	0.890	1.020
S	2.100	2.500
V	0.450	0.600
All Dimension in mm		



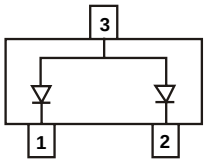
BAS70 Marking: K73, BE, 73



BAS70-04 Marking: K74, 74



BAS70-05 Marking: K75, 75



BAS70-06 Marking: K76, 76

MAXIMUM RATINGS (T_J = 150°C unless otherwise noted)

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

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage (I_R = 10 μA)	$V_{(BR)R}$	70	—	Volts
Total Capacitance (V_R = 0 V, f = 1.0 MHz)	C_T	—	2.0	pF
Reverse Leakage (V_R = 50 V) (V_R = 70 V)	I_R	— —	0.1 10	μAdc
Forward Voltage (I_F = 1.0 mAdc)	V_F	—	410	mVdc
Forward Voltage (I_F = 10 mAdc)	V_F	—	750	mVdc
Forward Voltage (I_F = 15 mAdc)	V_F	—	1.0	Vdc

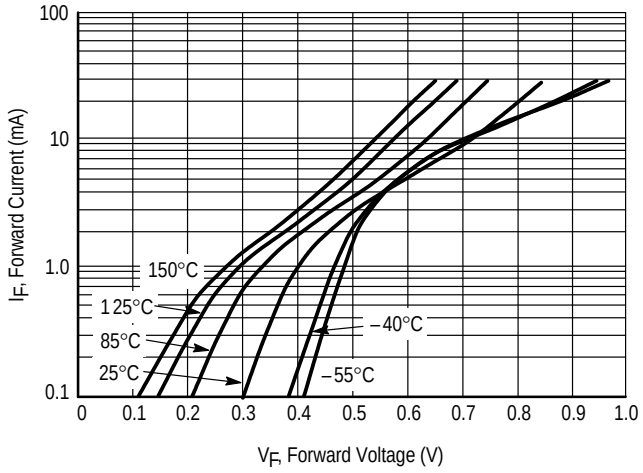


Figure 1. Typical Forward Voltage

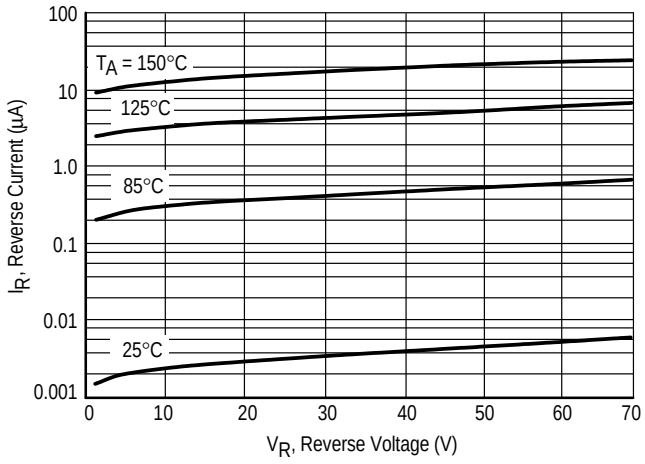


Figure 2. Reverse Current versus Reverse Voltage

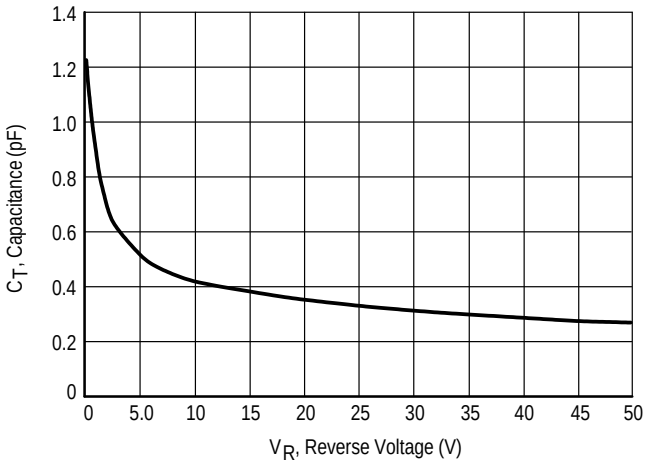


Figure 3. Typical Capacitance