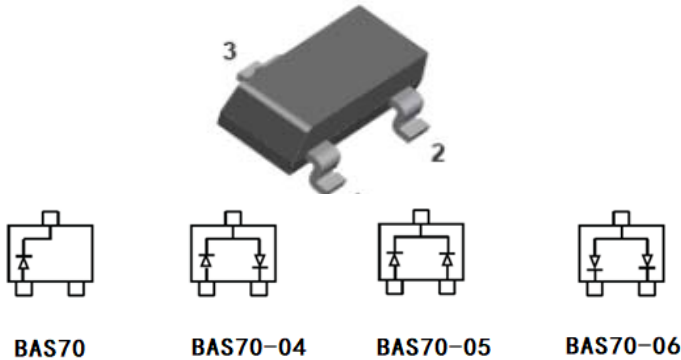


Schottky Barrier Diode



Features

- Meets MSL level 1
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

Mechanical Data

- **Package:** SOT-23
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

Marking:

BAS70	73
BAS70-04	74
BAS70-05	75
BAS70-06	76

Maximum Rating, (Ta=25°C Unless otherwise specified)

Item	Symbol	Unit	Value
Continuous Reverse Voltage	V_R	V	70
Forward Continuous Current	I_F	mA	70
Non-Repetitive Peak Forward Surge Current @ t = 8.3ms	I_{FSM}	A	0.1
Total Power Dissipation @ T _A =25°C	P_D	mW	200
Thermal Resistance, Junction to Ambient	R_{thJA}	°C/W	500
Operation Junction Temperature	T_J	°C	-55 to +125
Storage Temperature	T_{STG}	°C	-55 to +125

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS70	F2	Approximate 0.008	3000	30000	120000	7" reel
BAS70-04	F2	Approximate 0.008	3000	30000	120000	7" reel
BAS70-05	F2	Approximate 0.008	3000	30000	120000	7" reel
BAS70-06	F2	Approximate 0.008	3000	30000	120000	7" reel



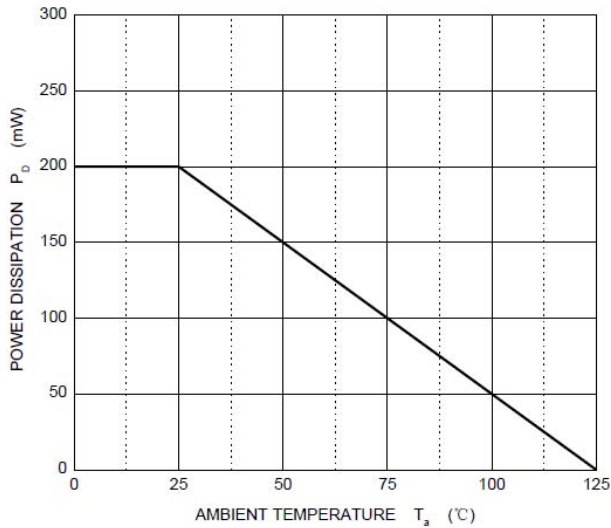
BAS70 THRU BAS70-06

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

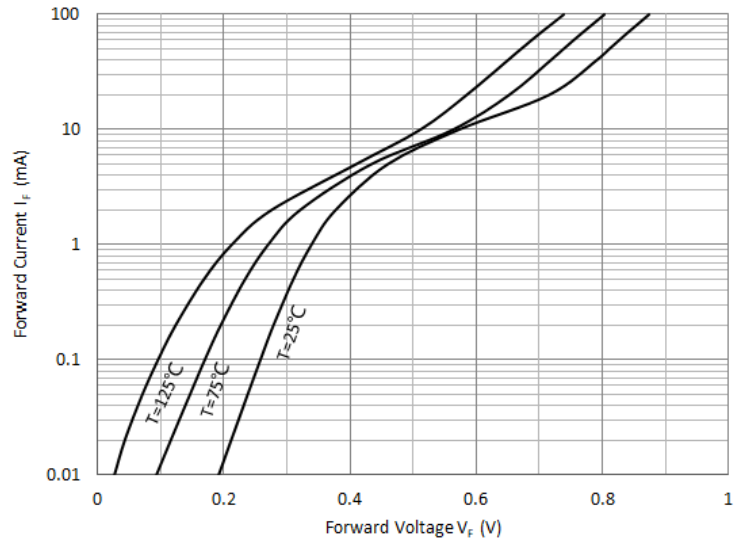
Item	Symbol	Unit	Conditions	Value
Maximum Instantaneous Forward Voltage	V _F	V	I _{FM} =1mA	0.41
			I _{FM} =15mA	1
Continuous Reverse Voltage	V _R	V	I _R =10uA	70
Maximum DC Reverse Current	I _R	uA	V _R =50V	0.2
Maximum Junction Capacitance	C _J	pF	f=1.0MHz, V _R =1.0V	2
Maximum Reverse Recovery Time	T _{rr}	ns	I _F =I _R =10mA, I _(REC) =1mA	5

■ Typical Characteristics

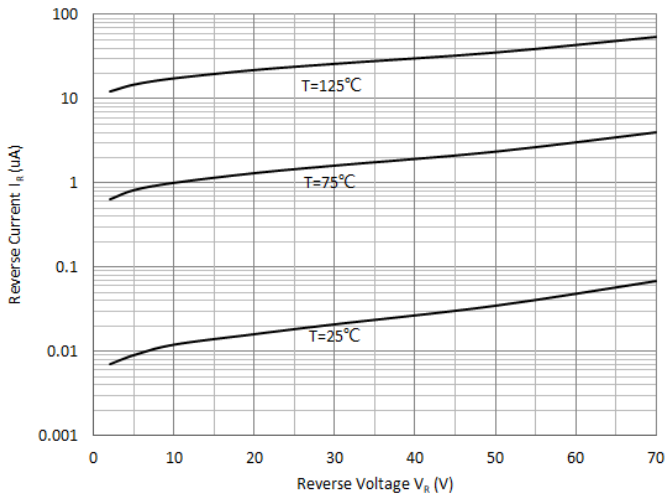
Power Derating Curve



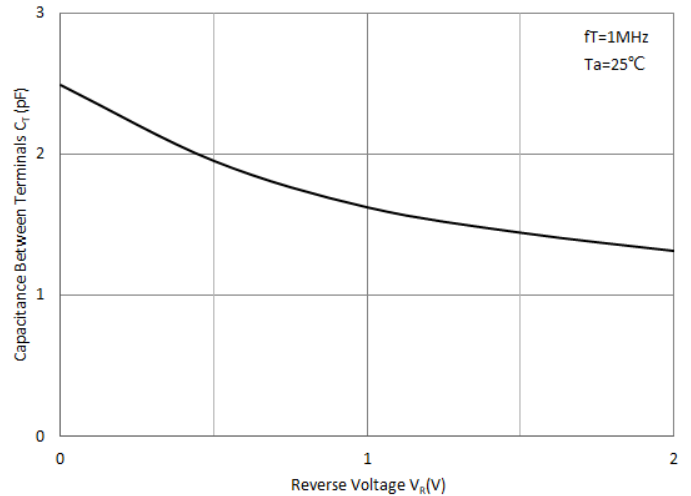
Forward Characteristics



Reverse Characteristics



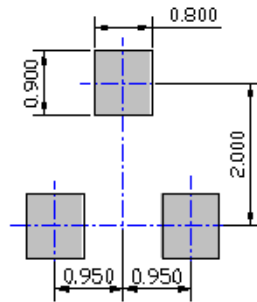
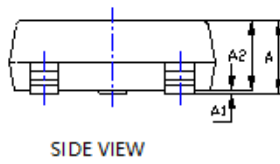
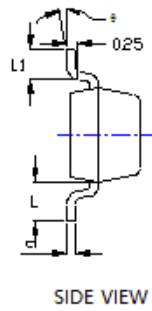
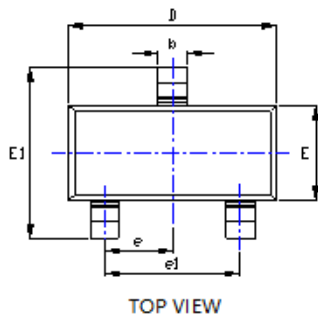
Capacitance Characteristics





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■SOT-23 Package Outline Dimensions



UNIT: mm

SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.045	0.900	1.150
A1	0.000	0.004	0.000	0.100
A2	0.035	0.041	0.900	1.050
b	0.012	0.020	0.300	0.500
c	0.004	0.008	0.100	0.200
D	0.110	0.118	2.800	3.000
E	0.047	0.055	1.200	1.400
E1	0.089	0.100	2.250	2.550
e	0.037TYP		0.950TYP	
e1	0.071	0.079	1.800	2.000
L	0.022REF		0.550REF	
L1	0.012	0.020	0.300	0.500
θ	0°	8°	0°	8°

NOTE:
 1. PACKAGE BODY SIZES EXCLUDE MOLD FLASH AND GATE BURRS.
 2. TOLERANCE 0.1mm UNLESS OTHERWISE SPECIFIED.
 3. THE PAD LAYOUT IS FOR REFERENCE PURPOSES ONLY.



BAS70 THRU BAS70-06

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