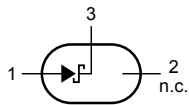
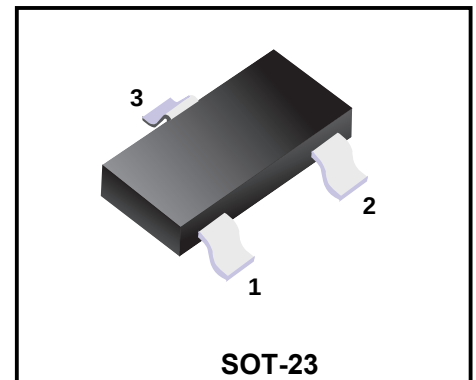


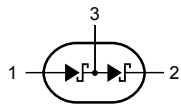
Schottky Diodes

Features

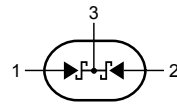
- Fast Switching Speed
- High breakdown voltage



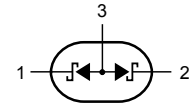
BAS70 single diode.



BAS70-04



BAS70-05



BAS70-06

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_{RM}	70	V
Peak Reverse Voltage	V_{RRM}	70	
Average Rectified Current at Temp=25°C	I_{FAV}	70	mA
Non-Repetitive Peak Forward Surge Current $t=1s$	I_{FSM}	100	
Power Dissipation	P_d	215	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	°C/W
Junction Temperature	T_J	150	°C
Storage Temperature range	T_{stg}	-55 to 150	

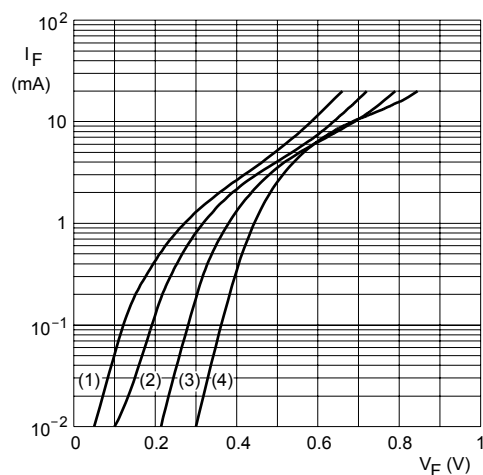
Electrical Characteristics (Ta=25°C unless otherwise specified.)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 10 \mu A$	70			V
Forward voltage	V_{F1}	$I_F = 1 mA$			0.41	
	V_{F2}	$I_F = 10 mA$			0.75	
	V_{F3}	$I_F = 15 mA$			1	
Reverse voltage leakage current	I_{R1}	$V_R = 70 V$			1	μA
	I_{R2}	$V_R = 50 V$			0.1	
Junction capacitance	C_j	$V_R = 0 V, f = 1 MHz$			2	pF

Marking Code

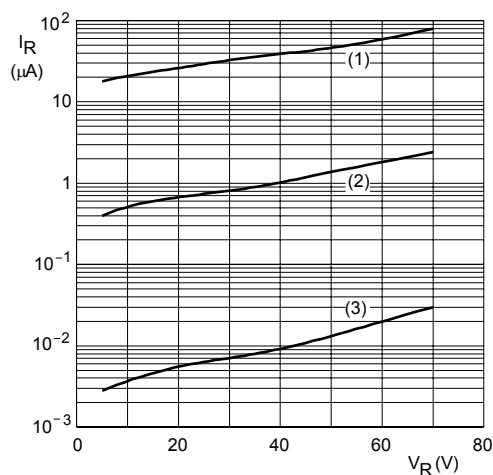
NO.	BAS70	BAS70-04	BAS70-05	BAS70-06
Marking	73	74	75	76

Typical Characteristics



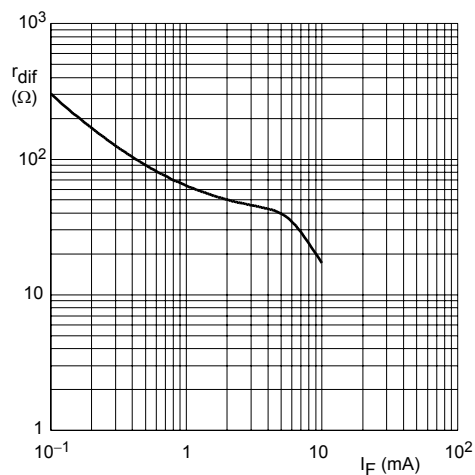
- (1) $T_{amb} = 125\text{ }^{\circ}\text{C}.$
- (2) $T_{amb} = 85\text{ }^{\circ}\text{C}.$
- (3) $T_{amb} = 25\text{ }^{\circ}\text{C}.$
- (4) $T_{amb} = -40\text{ }^{\circ}\text{C}.$

Fig. 1 Forward current as a function of forward voltage; typical values.



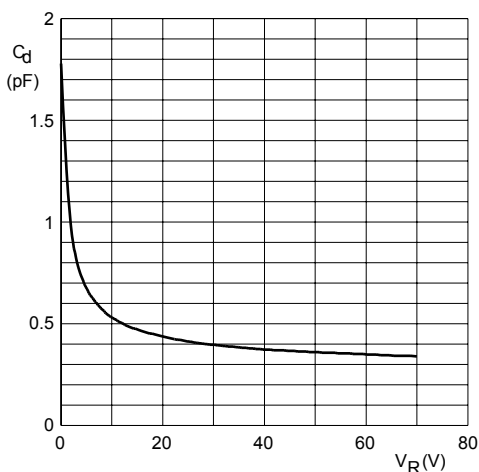
- (1) $T_{amb} = 150\text{ }^{\circ}\text{C}.$
- (2) $T_{amb} = 85\text{ }^{\circ}\text{C}.$
- (3) $T_{amb} = 25\text{ }^{\circ}\text{C}.$

Fig. 2 Reverse current as a function of reverse voltage; typical values.



$f = 10\text{ kHz}.$

Fig. 3 Differential forward resistance as a function of forward current; typical values.



$f = 1\text{ MHz}.$

Fig. 4 Diode capacitance as a function of reverse voltage; typical values.

Ordering information

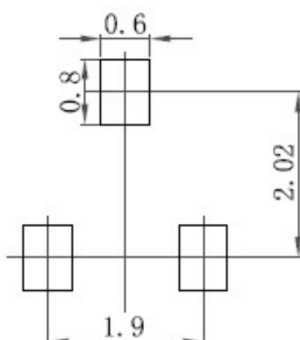
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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