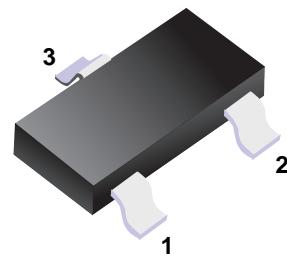


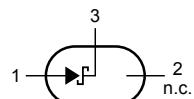
## ■ Schottky Diodes

### ■ Features

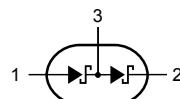
- Fast Switching Speed
- High breakdown voltage



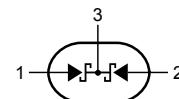
■ Simplified outline(SOT-23)



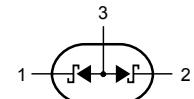
BAS70 single diode.



BAS70-04



BAS70-05



BAS70-06

### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V <sub>RM</sub>	70	V
Peak Reverse Voltage	V <sub>R<sub>RM</sub></sub>	70	
Average Rectified Current at Temp=25°C	I <sub>FAV</sub>	70	mA
Non-Repetitive Peak Forward Surge Current t=1s	I <sub>FSM</sub>	100	
Power Dissipation	P <sub>d</sub>	215	mW
Thermal Resistance Junction to Ambient	R <sub>θ JA</sub>	500	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

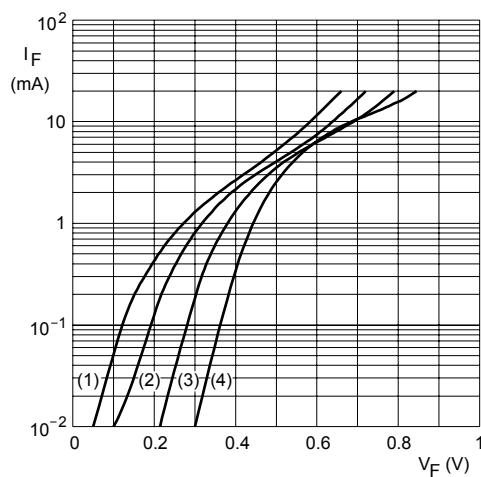
### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>R</sub>	I <sub>R</sub> = 10 uA	70			V
Forward voltage	V <sub>F1</sub>	I <sub>F</sub> = 1 mA			0.41	
	V <sub>F2</sub>	I <sub>F</sub> = 10 mA			0.75	
	V <sub>F3</sub>	I <sub>F</sub> = 15 mA			1	
Reverse voltage leakage current	I <sub>R1</sub>	V <sub>R</sub> = 70 V			1	uA
	I <sub>R2</sub>	V <sub>R</sub> = 50 V			0.1	
Junction capacitance	C <sub>j</sub>	V <sub>R</sub> = 0 V, f= 1 MHz			2	pF

### ■ Marking

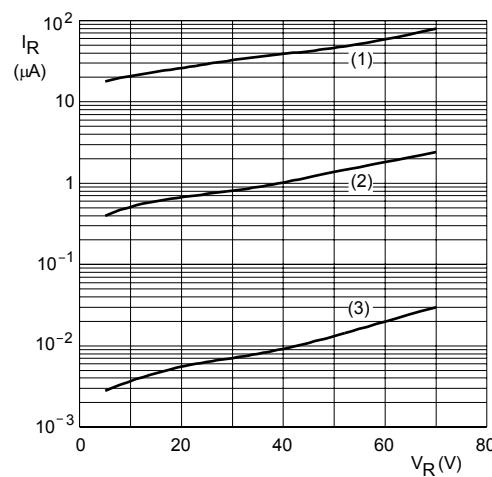
NO.	BAS70	BAS70-04	BAS70-05	BAS70-06
Marking	73	74	75	76

■ Typical Characteristics



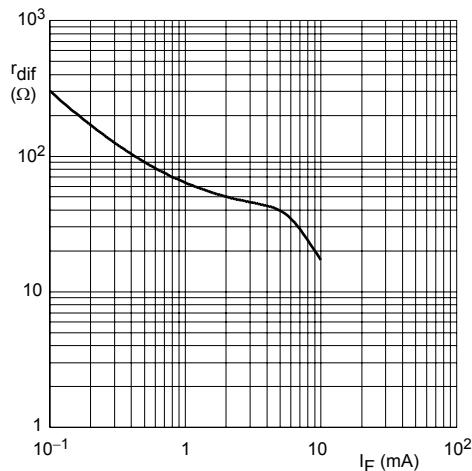
- (1)  $T_{amb} = 125 \text{ }^{\circ}\text{C}$ .
- (2)  $T_{amb} = 85 \text{ }^{\circ}\text{C}$ .
- (3)  $T_{amb} = 25 \text{ }^{\circ}\text{C}$ .
- (4)  $T_{amb} = -40 \text{ }^{\circ}\text{C}$ .

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



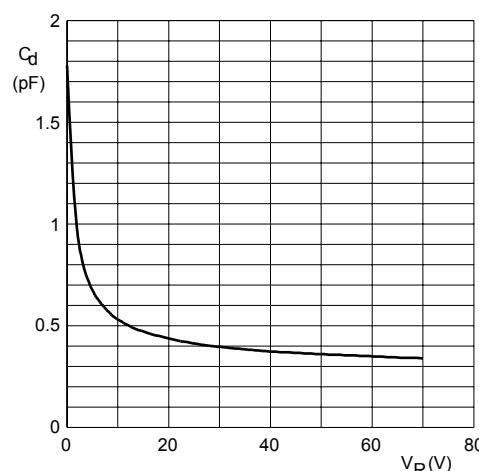
- (1)  $T_{amb} = 150 \text{ }^{\circ}\text{C}$ .
- (2)  $T_{amb} = 85 \text{ }^{\circ}\text{C}$ .
- (3)  $T_{amb} = 25 \text{ }^{\circ}\text{C}$ .

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



f = 10 kHz.

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

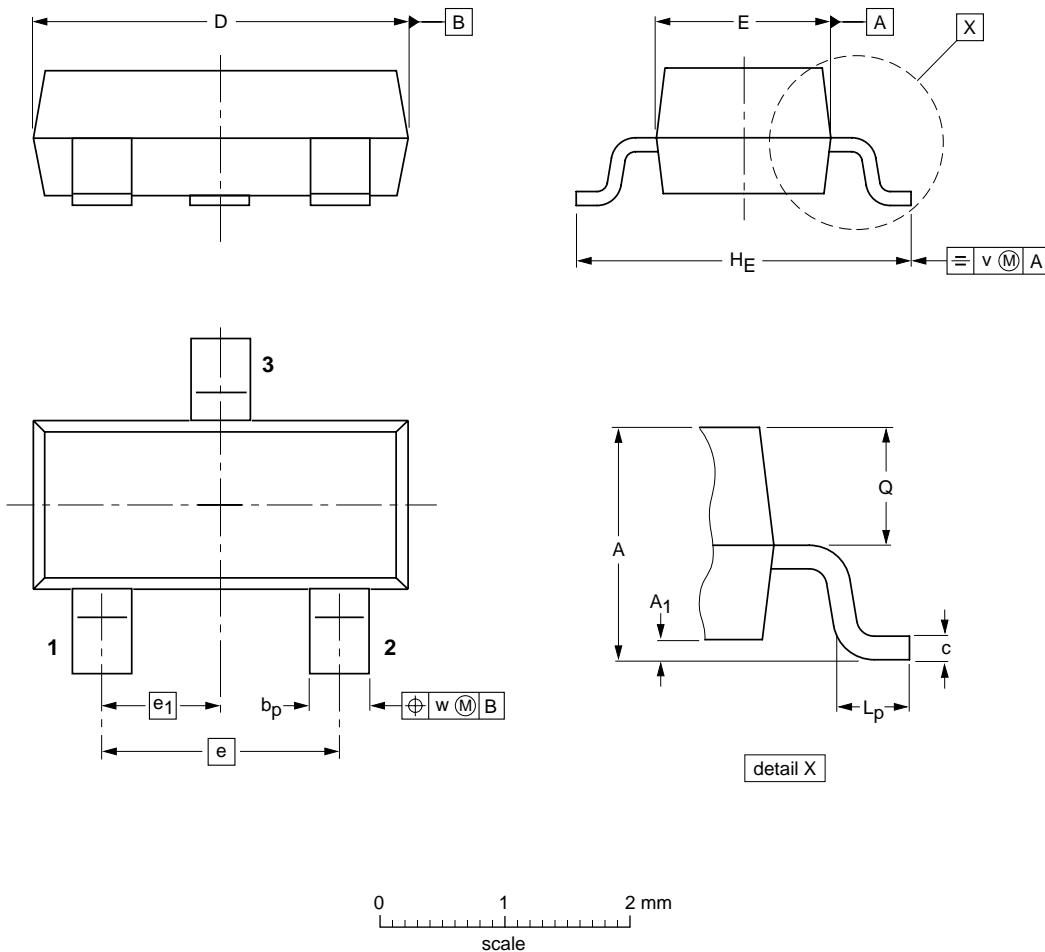


f = 1 MHz.

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

Package Outline

SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A <sub>1</sub> max.	b <sub>p</sub>	c	D	E	e	e <sub>1</sub>	H <sub>E</sub>	L <sub>p</sub>	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel,7"reel	3000	EIA-481-1