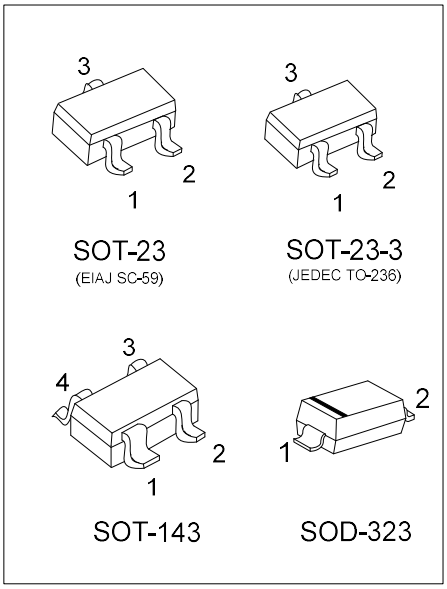
BAS70x

DIODE

SCHOTTKY BARRIER DIODES



■ DESCRIPTION

Planar Schottky barrier diodes encapsulated in the SOT-23 small plastic SMD package. Single diodes and dual diodes with different pin configuration are available.

■ FEATURES

* Low Turn-on voltage
* Fast switching
* Ultra-small surface mount package
* Also available in lead free version

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment				Packing
Lead Free	Halogen Free		1	2	3	4	
BAS70L-AD4-R	BAS70G-AD4-R	SOT-143	K1	K2	A2	A1	Tape Reel
BAS70L-AE2-R	BAS70G-AE2-R	SOT-23-3	A	NC	K	-	Tape Reel
BAS70L-CB2-R	BAS70G-CB2-R	SOD-323	K	A	-	-	Tape Reel
BAS70AL-AE2-R	BAS70AG-AE2-R	SOT-23-3	K1	K2	A1A2	-	Tape Reel
BAS70CL-AE2-R	BAS70CG-AE2-R	SOT-23-3	A1	A2	K1K2	-	Tape Reel
BAS70SL-AE2-R	BAS70SG-AE2-R	SOT-23-3	A1	K2	K1A2	-	Tape Reel
BAS70L-AE3-R	BAS70G-AE3-R	SOT-23	A	NC	K	-	Tape Reel
BAS70AL-AE3-R	BAS70AG-AE3-R	SOT-23	K1	K2	A1A2	-	Tape Reel
BAS70CL-AE3-R	BAS70CG-AE3-R	SOT-23	A1	A2	K1K2	-	Tape Reel
BAS70SL-AE3-R	BAS70SG-AE3-R	SOT-23	A1	K2	K1A2	-	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode NC: No Connection

BAS70xG-AE2-R
(1) Packing Type
(2) Package Type
(3) Green Package
(4) Diode Configuration

(1) R: Tape Reel
(2) AD4: SOT-143, AE2: SOT-23-3, AE3: SOT-23
CB2: SOD-323
(3) G: Halogen Free and Lead Free, L: Lead Free
(4) x: refer to DIODE CONFIGURATION AND SYMBOL

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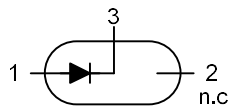
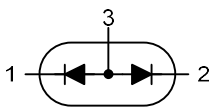
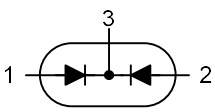
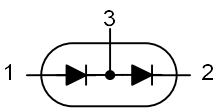
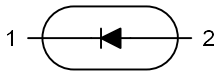
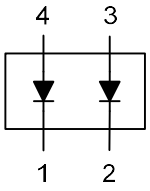
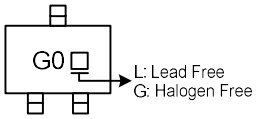
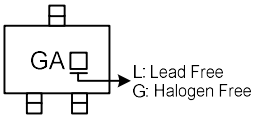
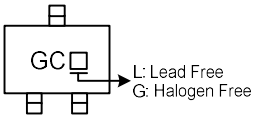
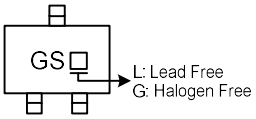
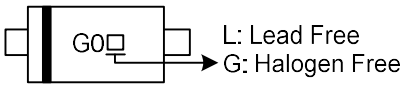
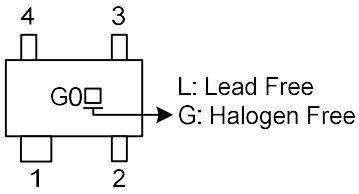
■ DIODE CONFIGURATION AND SYMBOL

SOT-23-3/SOT-23

BAS70	BAS70A	BAS70C	BAS70S
SOT-23-3/SOT-23			
			
BAS70			
SOD-323		SOT-143	
			

■ MARKING

BAS70	BAS70A	BAS70C	BAS70S
SOT-23-3/SOT-23			
			
BAS70			
SOD-323		SOT-143	
			

■ ABSOLUATE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNITS
DC Voltage	V_R	70	V
Forward Continuous Current	I_F	70	mA
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	-55 ~ +150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

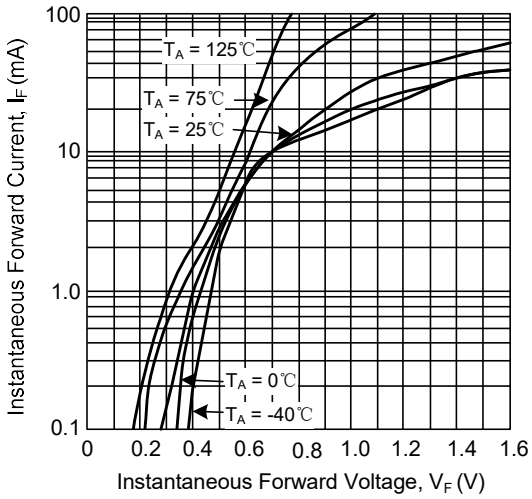
Note Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

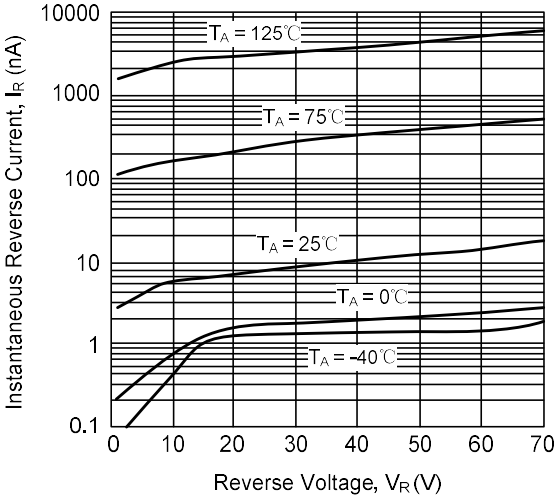
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Breakdown Voltage	BV_R	I_R= 10μA	70			V
Reverse Voltage Leakage Current	I_R	V_R=50V			100	nA
Forward Voltage	V_F	I_F=1mA			410	mV
		I_F=15mA			1000	mV
Diode Capacitance	C_d	V_R=0V, f=1MHz			2	pF
Reveres Recovery Time	t_{RR}	I_F=I_R=10mA, I_{RR}=0.1xI_R, R_L=100Ω			5	nS

■ TYPICAL CHARACTERISTICS

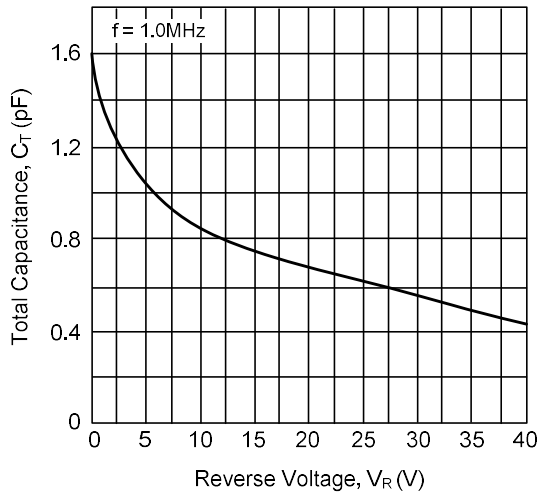
Typical Forward Characteristics



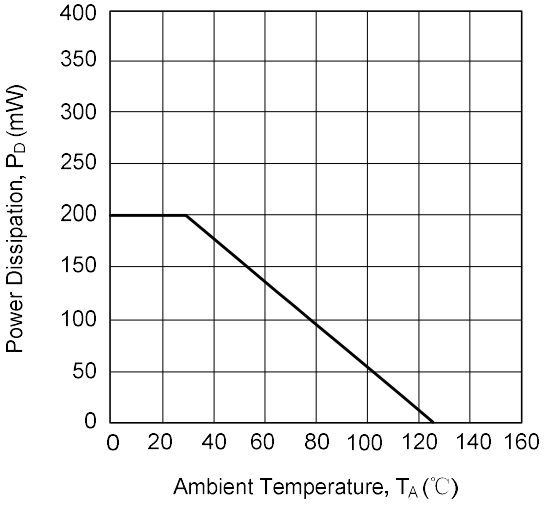
Typical Reverse Characteristics



Typical Capacitance



Power Derating Curve, Total Package



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