

SOT-323 Plastic-Encapsulate Diodes**BAS70W/-04/-05/-06**

SCHOTTKY BARRIER DIODE

FEATURES

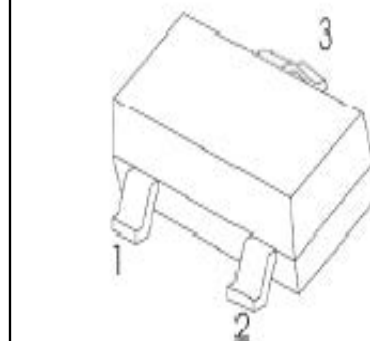
- Fast Switching Speed
- Low Turn-on Voltage

MARKING

BAS70W	BAS70W-04	BAS70W-05	BAS70W-06

Equivalent Circuit

BAS70W	BAS70W-04	BAS70W-05	BAS70W-06

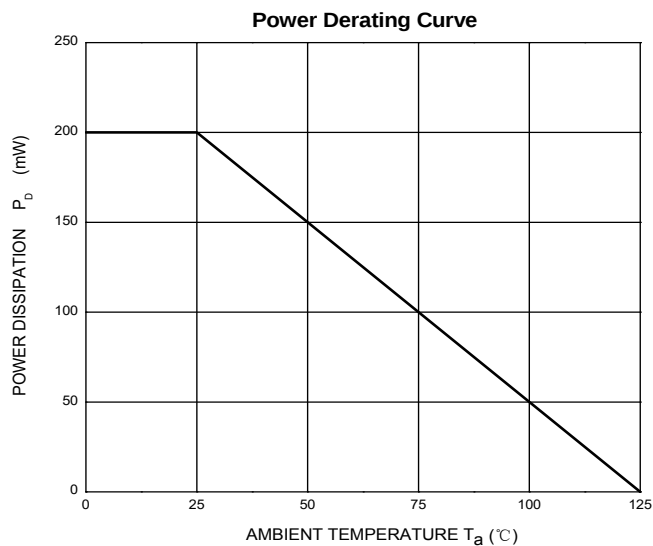
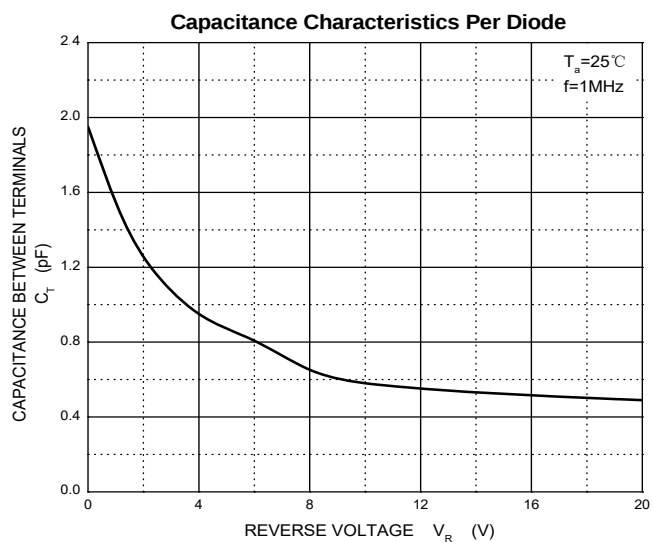
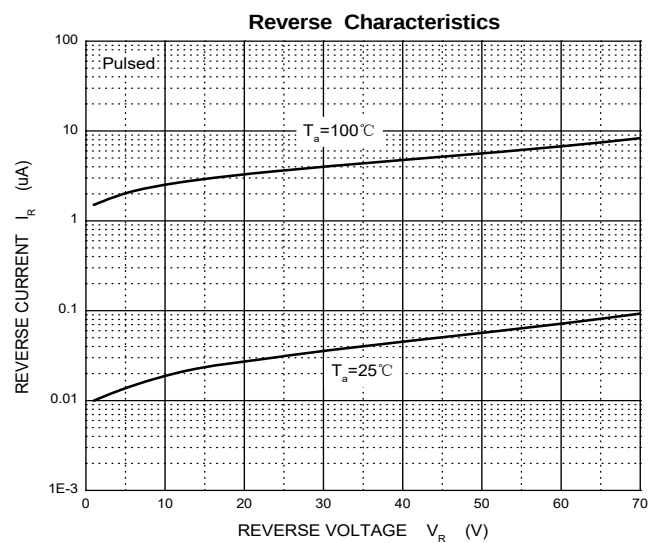
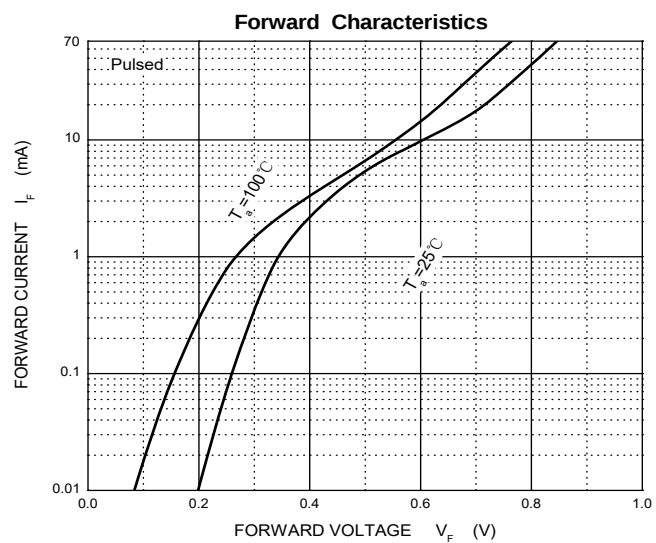
SOT-323**MAXIMUM RATINGS** ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_R	DC Voltage	70	V
I_F	Forward Continuous Current	70	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t = 8.3\text{ms}$	100	mA
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	$^{\circ}\text{C/W}$
T_J	Operating Junction Temperature Range	$-40 \sim +125$	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	$-55 \sim +150$	$^{\circ}\text{C}$

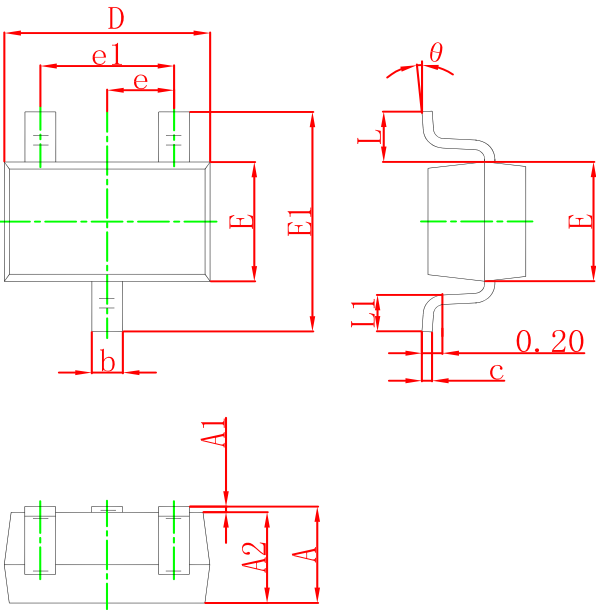
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 10\mu\text{A}$	70		V
Reverse voltage leakage current	I_R	$V_R = 50\text{V}$		100	nA
Forward voltage	V_F	$I_F = 1\text{mA}$ $I_F = 15\text{mA}$		410 1000	mV
Diode capacitance	C_D	$V_R = 0\text{V}, f = 1\text{MHz}$		2	pF
Reveres recovery time	t_{rr}	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$		5	ns

Typical Characteristics

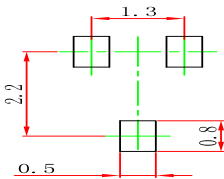


Package Outline Dimensions (SOT-323)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout (SOT-323)



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.