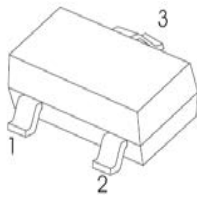
SHENZHEN JIECHENG SEMICONDUCTOR TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate Diodes

BAS70/-04/-05/-06

SCHOTTKY BARRIER DIODE

SOT－23



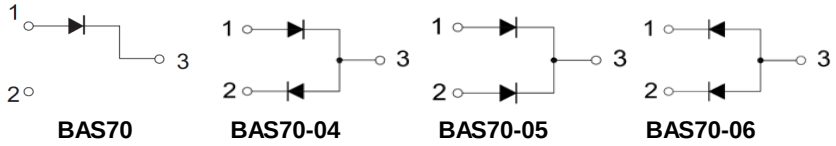
FEATURES

- Fast Switching Speed
- Low Trun-on Voltage

MARKING

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

Equivalent Circuit



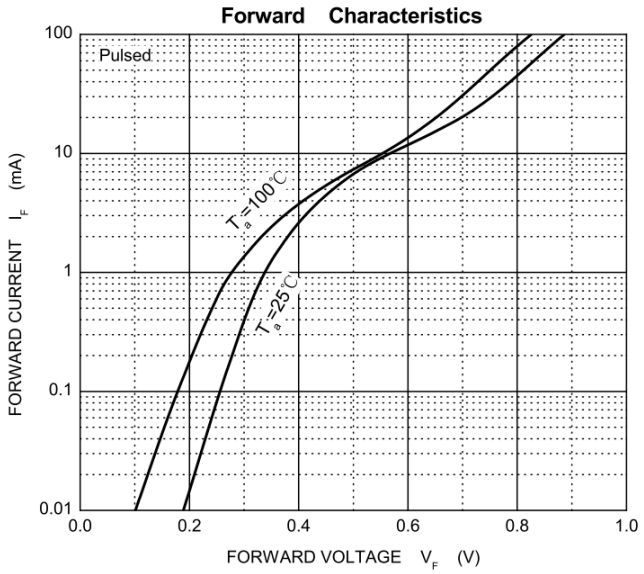
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

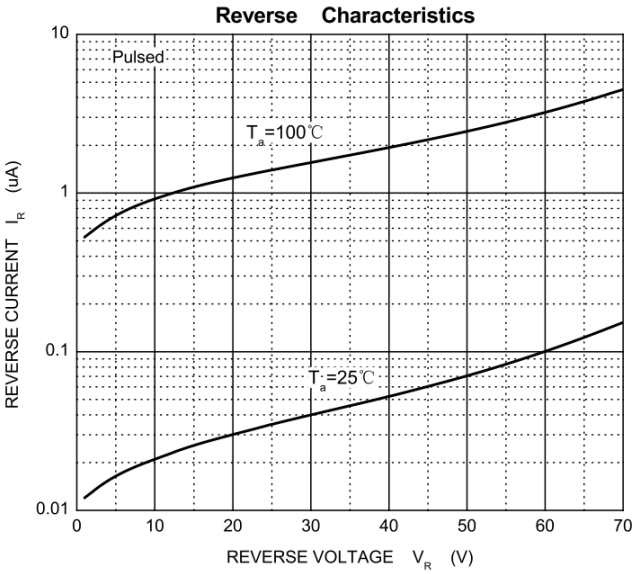
Symbol	Parameter	Value	Unit
V_R	DC Voltage	70	V
I_F	Forward Continuous Current	70	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ t = 8.3ms	100	mA
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	500	℃/W
T_J	Operating Junction Temperature Range	-40 ~ +125	℃
T_{stg}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

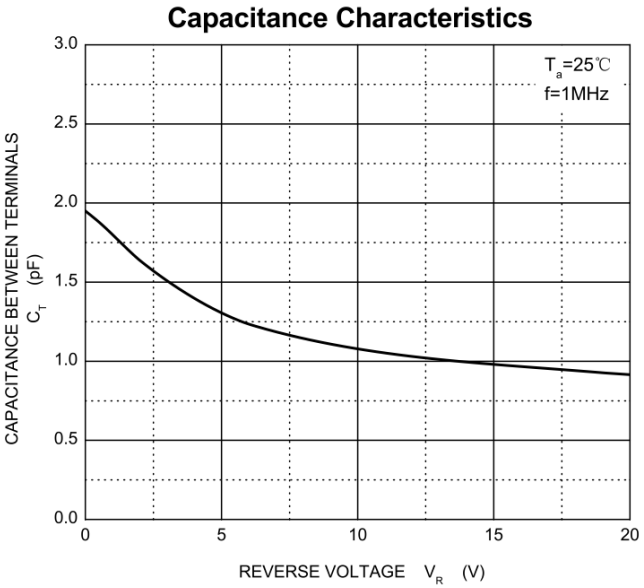
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

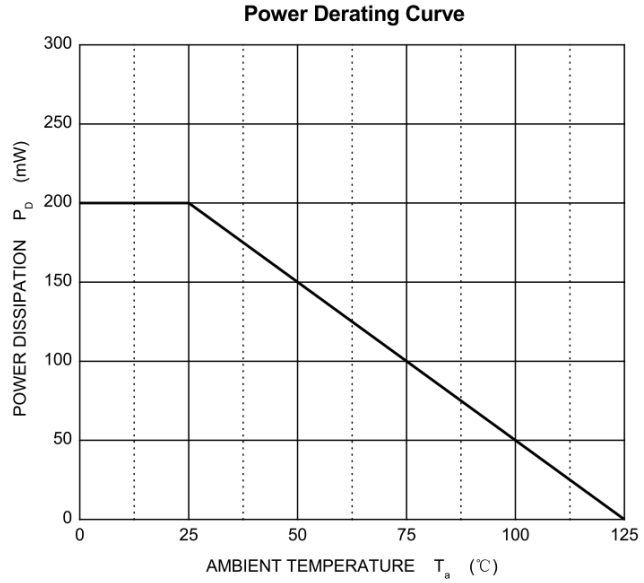
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 10μA	70		V
Reverse voltage leakag e current	I_R	V_R=50V		100	nA
Forward voltage	V_F	I_F=1mA I_F=15mA		410 1000	mV
Diode cap acitance	C_D	V_R=0V f=1MHz		2	pF
Reveres recovery time	t_{rr}	I_F=I_R=10mA,I_{rr}=0.1xI_R, R_L=100Ω		5	ns

Typical Characteristics

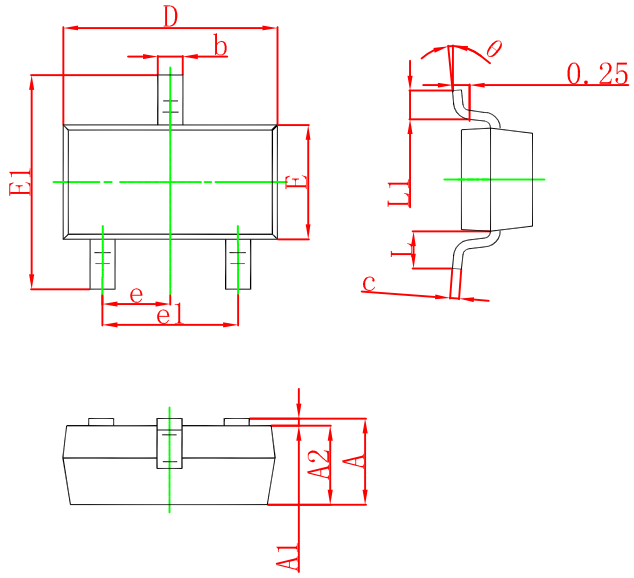






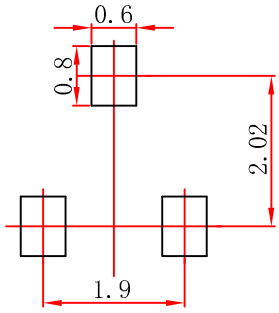


Package Outline Dimensions (SOT-23)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Suggested Pad Layout (SOT-23)



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