

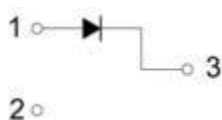
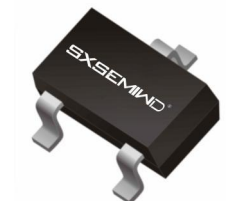
FEATURES

Low Forward Voltage

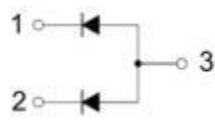
Fast Switching

Also available in lead free version

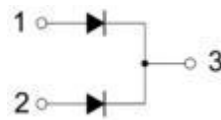
SOT-23



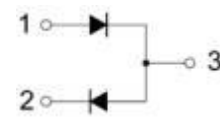
BAS70
MARKING:73



BAS70-06
MARKING:76



BAS70-05
MARKING:75



BAS70-04
MARKING:74

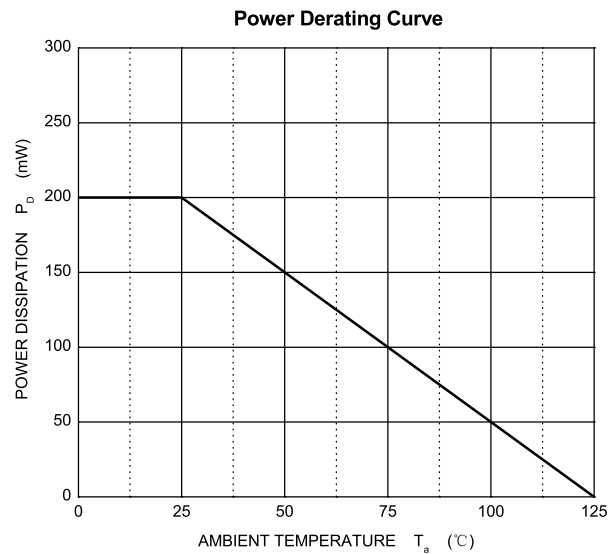
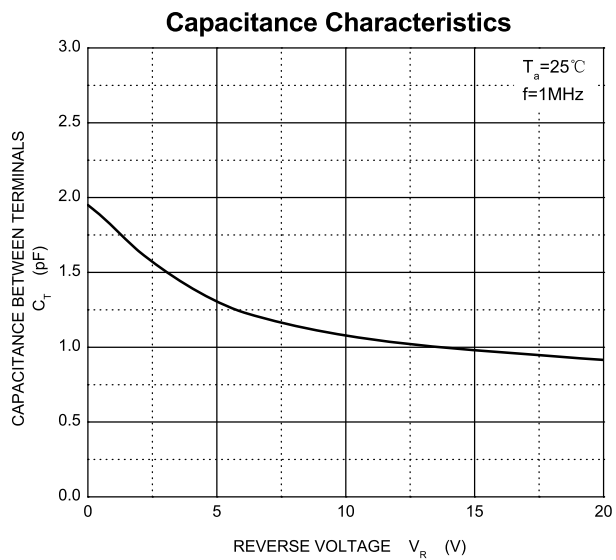
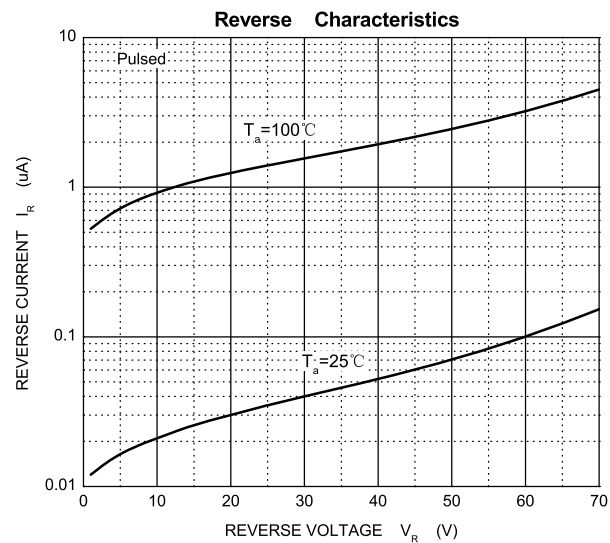
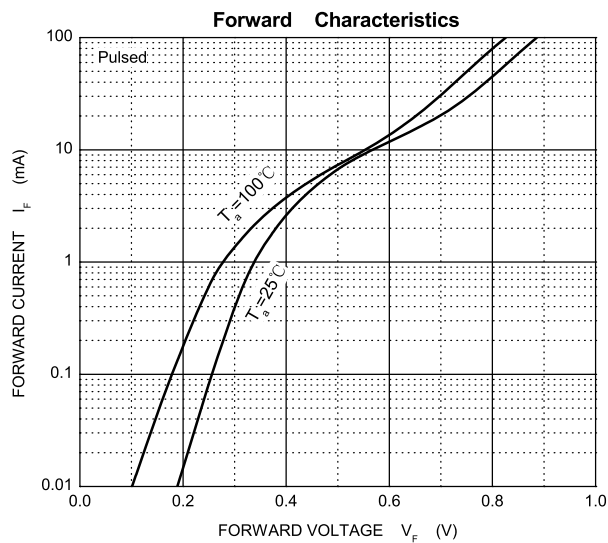
MAXIMUM RATINGS @Ta=25°C

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	°C/W
T_J	operating Junction Temperature Range	-40~+125	°C
T_{stg}	Storage Temperature Range	-55~+150	°C

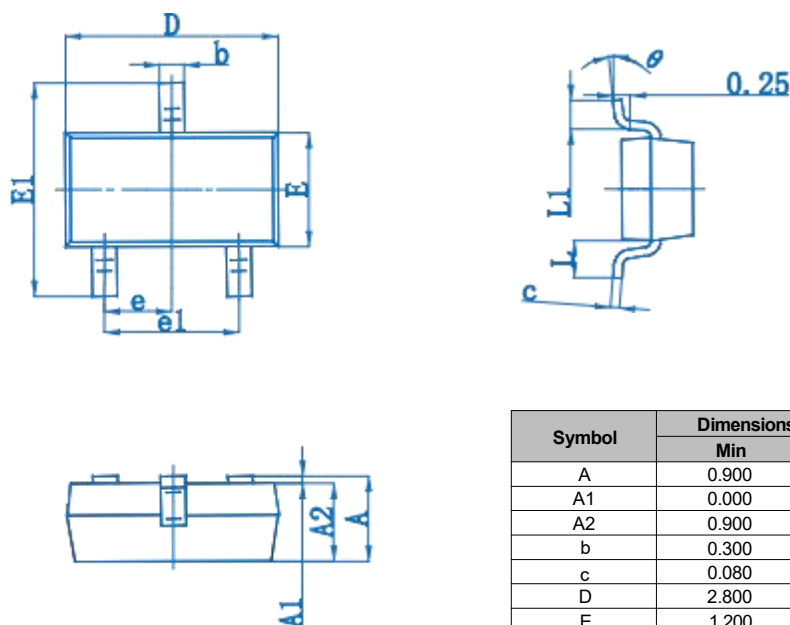
ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

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

Typical Characteristics

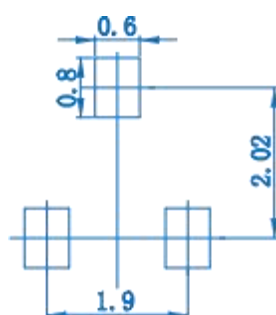


SOT-23 Package Outline Dimensions



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°

SOT-23 Suggested Pad Layout



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