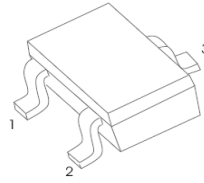




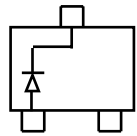
### BAS70T/-04T/-05T/06T SCHOTTKY BARRIER DIODE

#### FEATURES

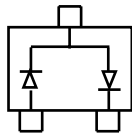
- Low Turn-on Voltage
- Fast Switching



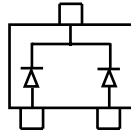
**SOT-523**



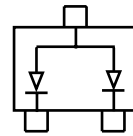
BAS70T Marking: 7C



BAS70-04T Marking: 7D



BAS70-05T Marking: 7E



BAS70-06T Marking: 7F

#### Maximum Ratings @Ta=25°C

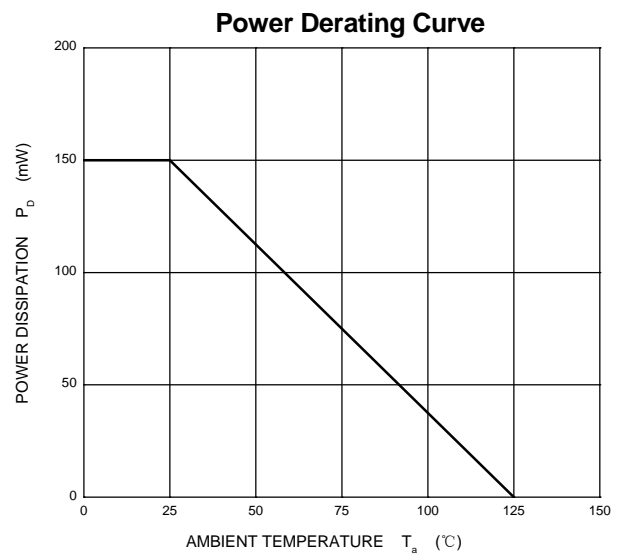
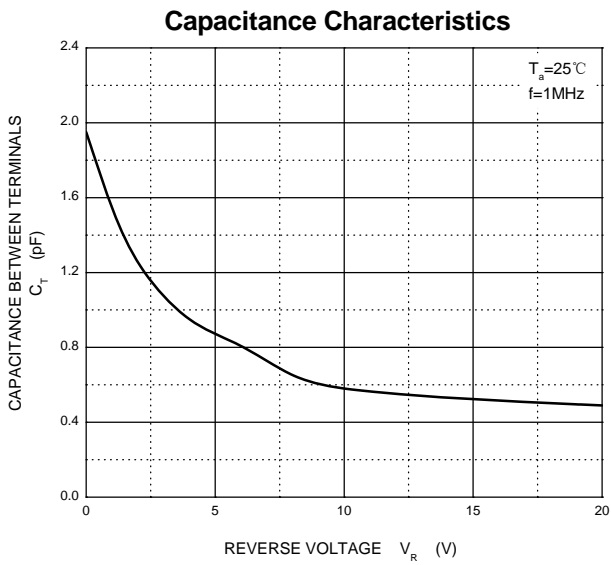
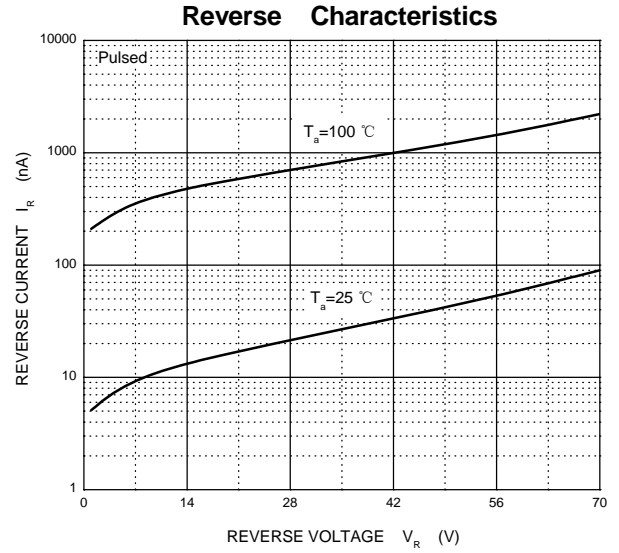
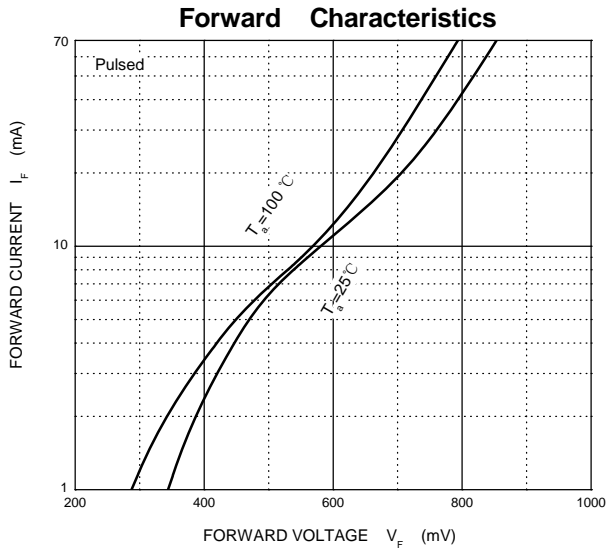
Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	70	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
Forward Continuous Current	$I_{FM}$	70	mA
Non-Repetitive Peak Forward Surge Current @ t = 8.3ms	$I_{FSM}$	100	mA
Power Dissipation	$P_D$	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667	°C/W
Junction temperature	$T_J$	125	°C
Storage Temperature	$T_{STG}$	-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	$C_D$	$V_R=0, f=1MHz$		2	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10mA, I_{rr}=0.1I_R,$ $R_L=100\Omega$		5	ns

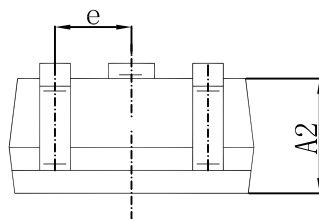
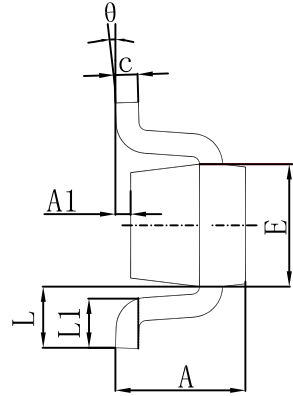
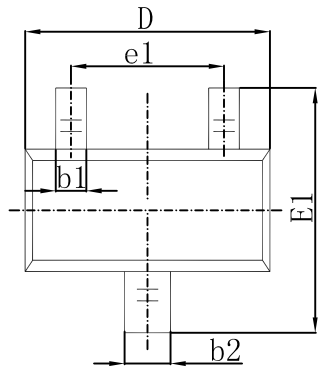


## Typical Characteristics



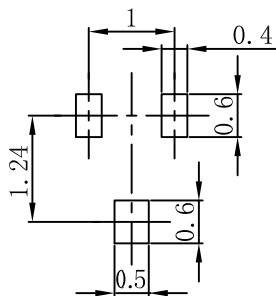


## SOT-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
theta	0°	8°	0°	8°

## SOT-523 Suggested Pad Layout



- Note:
- Controlling dimension: in millimeters.
  - General tolerance:  $\pm 0.05\text{mm}$ .
  - The pad layout is for reference purposes only.