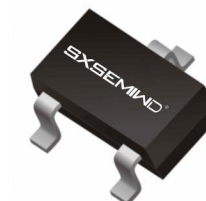


FEATURES

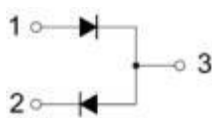
Low forward voltage

Fast switching

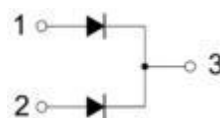
SOT-523



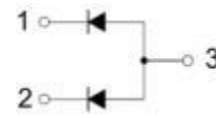
BAS40T
MARKING:43



BAS40-04T
MARKING:44



BAS40-05T
MARKING:45



BAS40-06T
MARKING:46

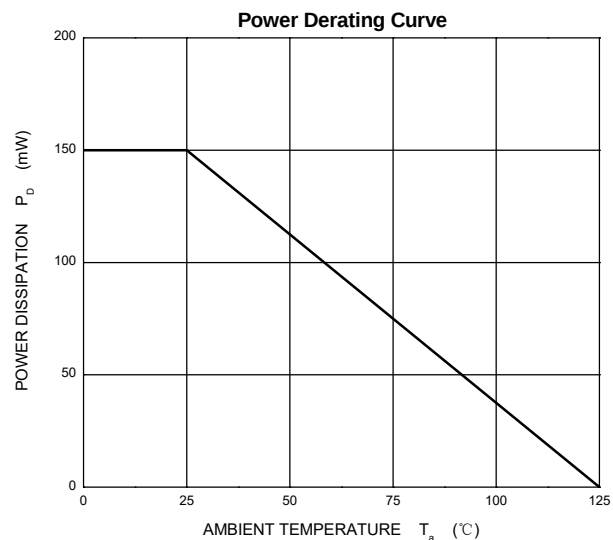
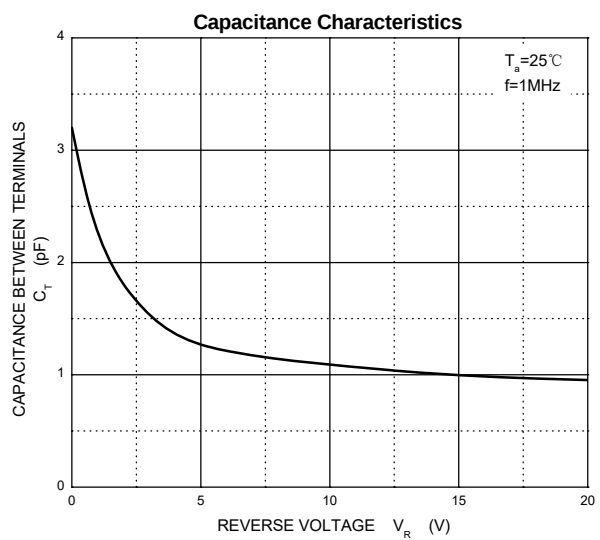
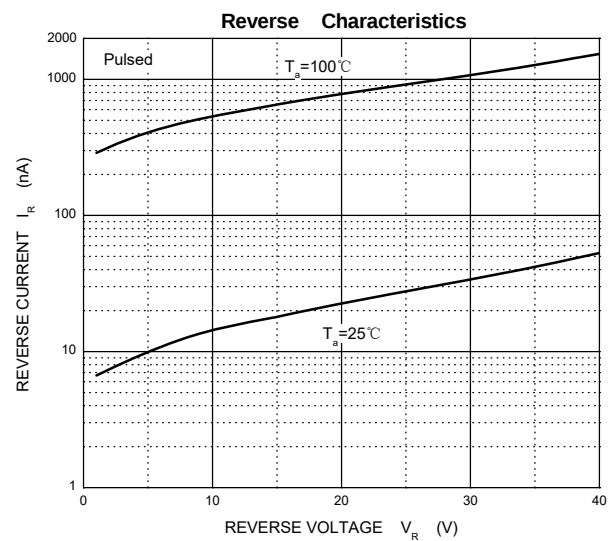
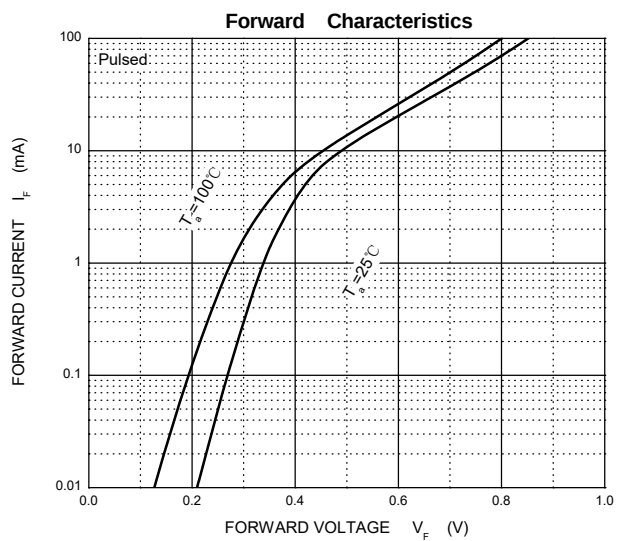
Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_{FM}	200	mA
Average Rectified Output Current	I_o	200	mA
Non-Repetitive Peak Forward Surge Current @ t = 8.3ms	I_{FSM}	0.6	A
Power Dissipation	P_D	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667	°C/W
Operating Junction Temperature Range	T_J	-40 ~ +125	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

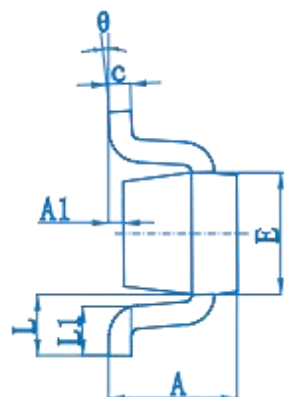
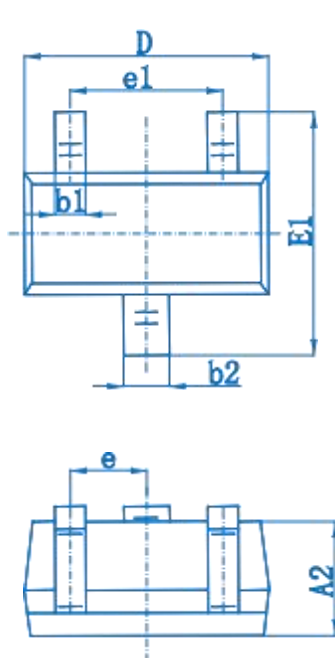
Electrical Characteristics @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	40			V	$I_R=10\mu A$
Forward Voltage	V_{F1}			0.38	V	$I_F=1mA$
	V_{F2}			1	V	$I_F=40mA$
Reverse Current	I_R			0.2	μA	$V_R=30V$
Diode Capacitance	C_D			5	pF	$V_R=0, f=1MHz$
Reverse Recovery Time	t_{rr}			5	ns	$I_F=I_R=10mA$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

Typical Characteristics

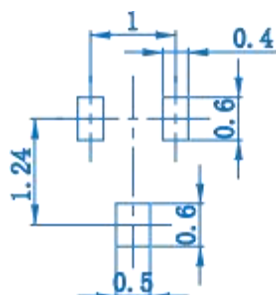


SOT-523 Package Outline Dimensions



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
θ	0°	8°	0°	8°

SOT-523 Suggested Pad Layout



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