

FEATURES

Low Forward Voltage

Fast Switching

SOT-323



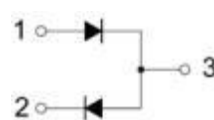
BAS40W
MARKING:43



BAS40W-06
MARKING:46



BAS40W-05
MARKING:45



BAS40W-04
MARKING:44

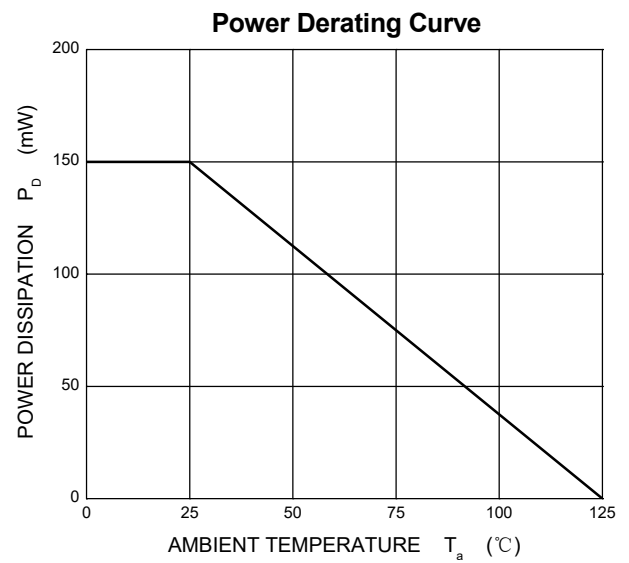
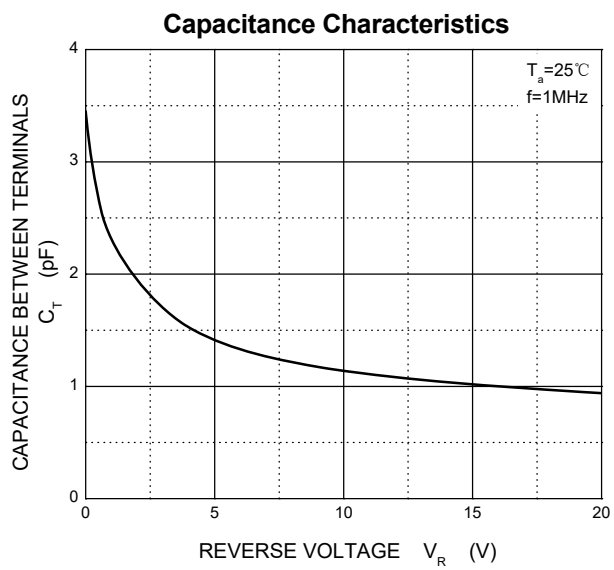
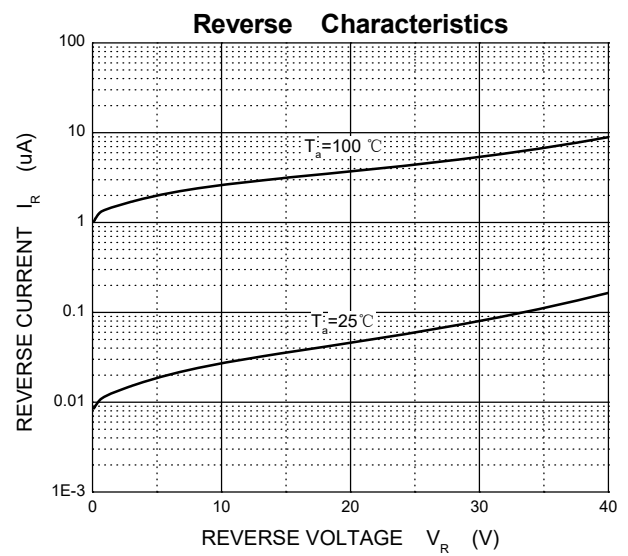
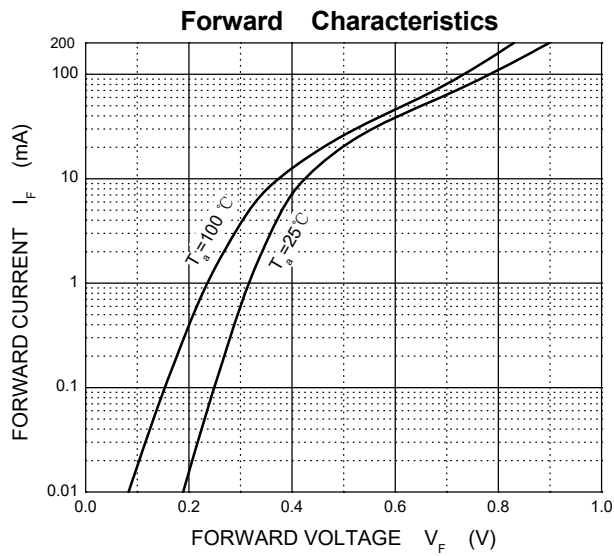
Maximum Ratings @Ta=25°C

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
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

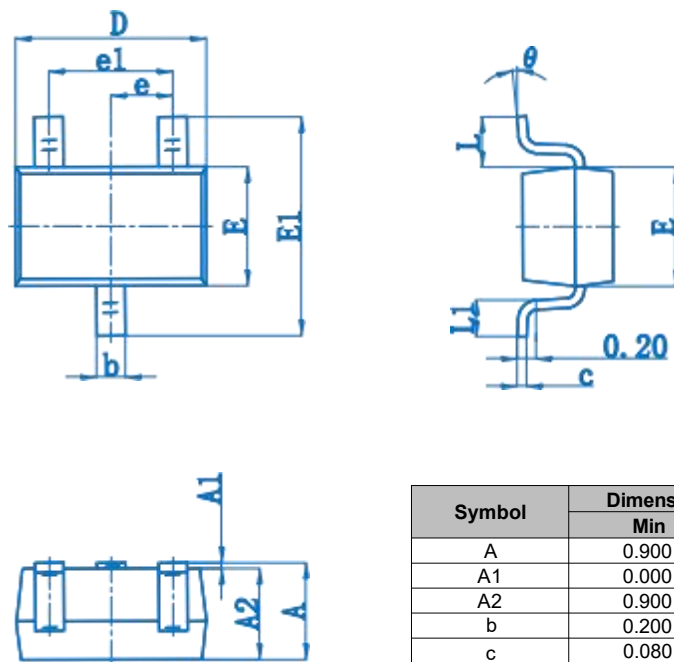
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 10\mu A$	40		V
Reverse voltage leakage current	I_R	$V_R = 30V$		200	nA
Forward voltage	V_F	$I_F = 1mA$ $I_F = 40mA$		380 1000	mV
Diode capacitance	C_D	$V_R = 0, f = 1MHz$		5	pF
Reverse recovery time	t_{rr}	$I_{rr} = 1mA, I_R = I_F = 10mA$ $R_L = 100\Omega$		5	ns

Typical Characteristics

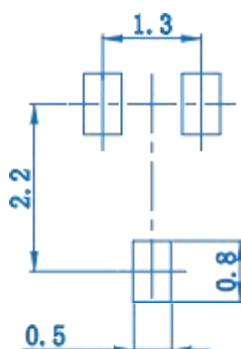


SOT-323 Package Outline Dimensions



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°

SOT-323 Suggested Pad Layout



Note:

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