

SOT-323 Plastic-Encapsulate Diodes**BAS40W/-04/-05/-06**

SCHOTTKY BARRIER DIODE

FEATURES

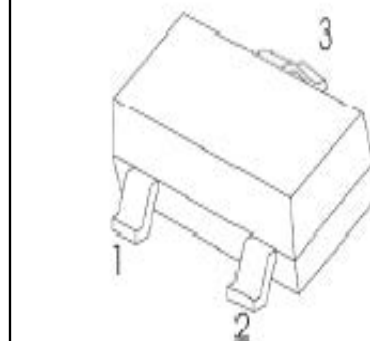
- Fast Switching Speed
- Low Forward Voltage

MARKING

BAS40W	BAS40W-04	BAS40W-05	BAS40W-06

Equivalent Circuit

BAS40W	BAS40W-04	BAS40W-05	BAS40W-06

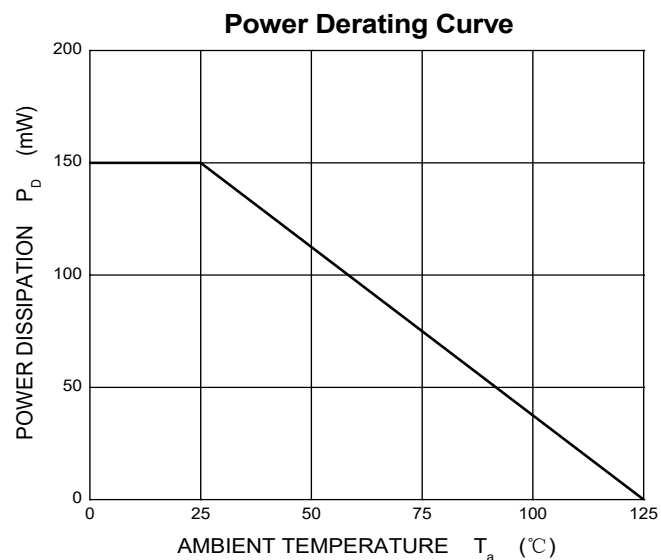
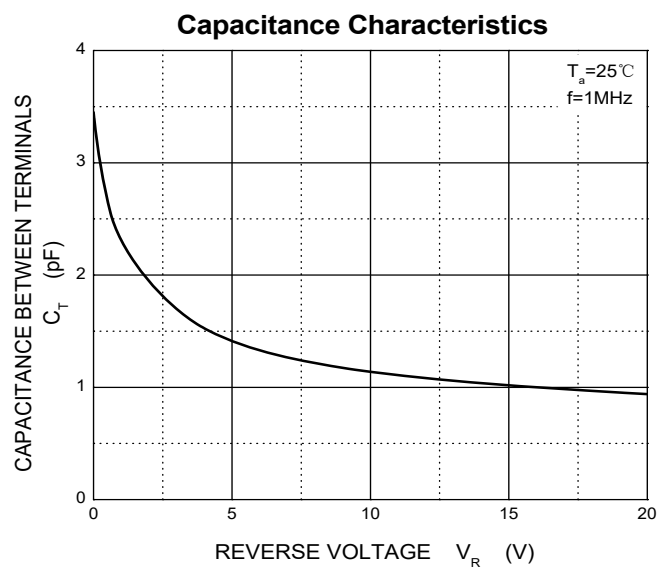
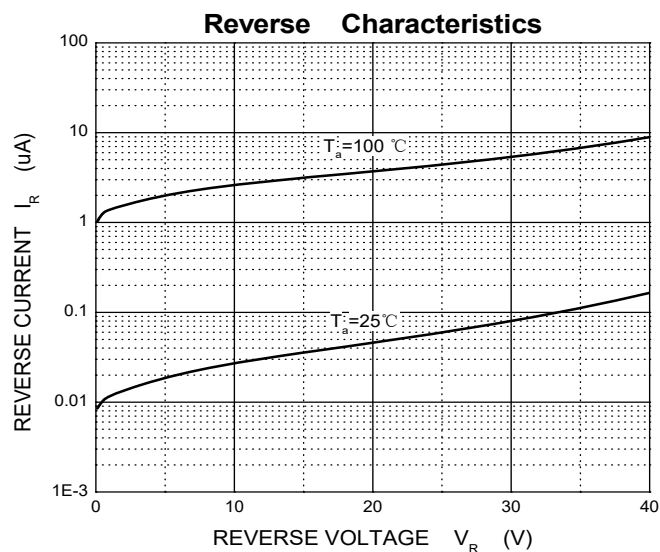
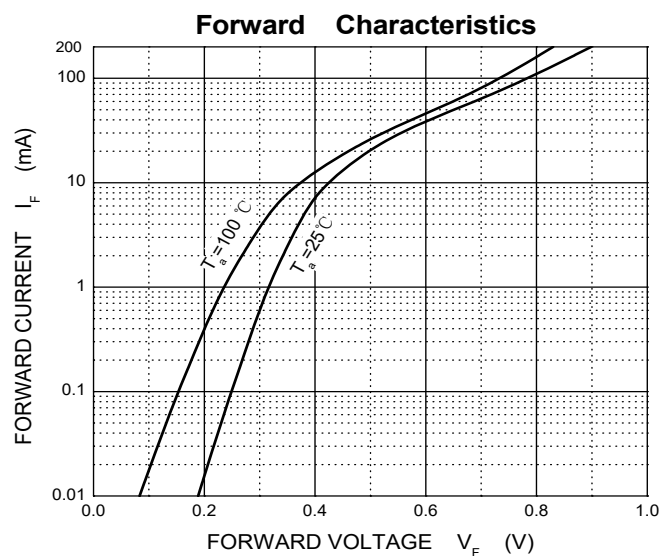
SOT-323**MAXIMUM RATINGS** ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

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	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-40 ~ +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

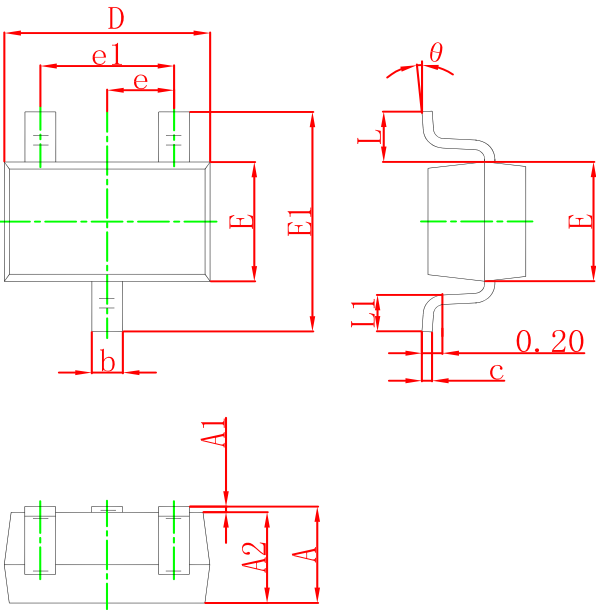
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

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

Typical Characteristics

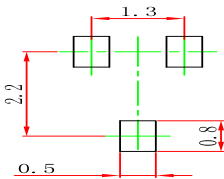


Package Outline Dimensions (SOT-323)



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°

Suggested Pad Layout (SOT-323)



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