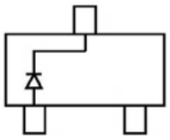
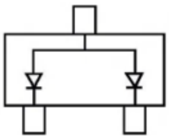
BAS40W/-04/-05/-06 SCHOTTKY BARRIER DIODE

FEATURES

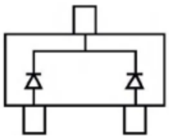
- Low Forward Voltage
- Fast Switching



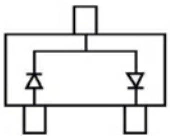
BAS40W



BAS40W-06



BAS40W-05



BAS40W-04

MARKING:

BAS40W : 43
BAS40W-06 : 46
BAS40W-05 : 45
BAS40W-04 : 44

Maximum Ratings @Ta=25℃

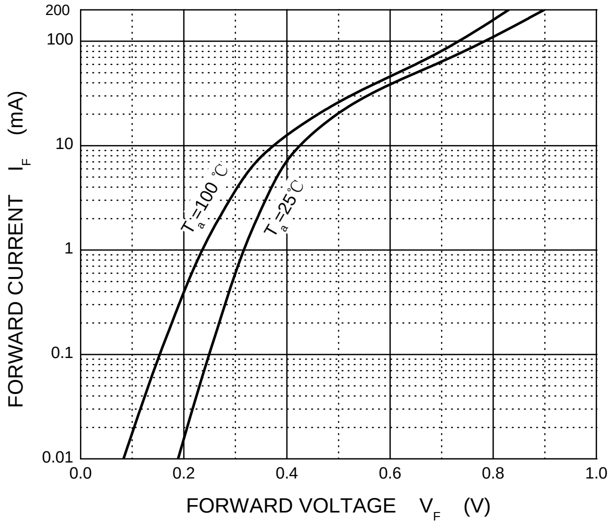
Parameter	Symbol	Limit	Unit
Peak repetitive peak reverse voltage **Working peak reverse voltage** **DC blocking voltage**	V_{RRM} V_{RWM} V_R	40	V
Forward continuous current	I_{FM}	200	mA
Power dissipation	P_D	150	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	667	℃/W
Junction temperature	T_J	125	℃
Storage temperature range	T_{STG}	-55~+150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

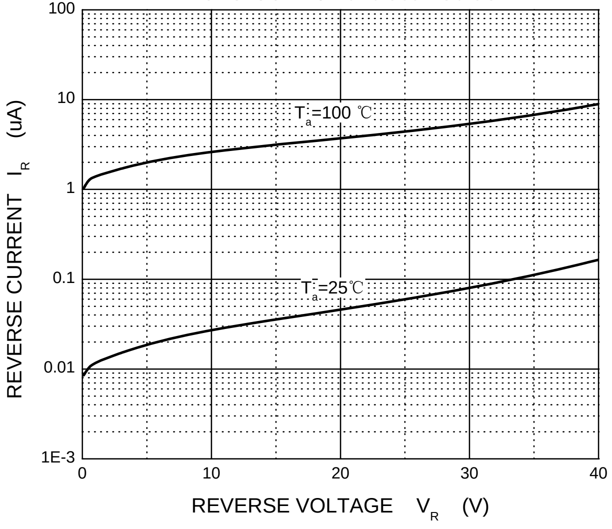
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 10μA	40		V
Reverse voltage leakage current	I_R	V_R=30V		200	nA
Forward voltage	V_F	I_F=1mA I_F=40mA		380 1000	mV
Diode capacitance	C_D	V_R=0,f=1MHz		5	pF
Reverse recovery time	t_{rr}	I_{rr}=1mA, I_R=I_F=10mA R_L=100Ω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

Typical Characteristics

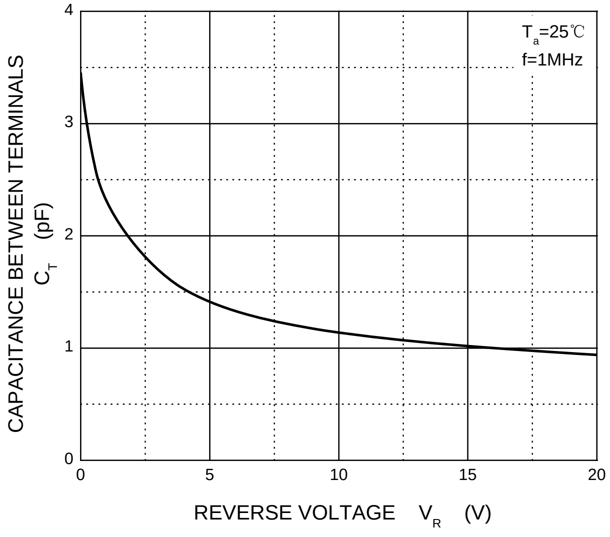
Forward Characteristics



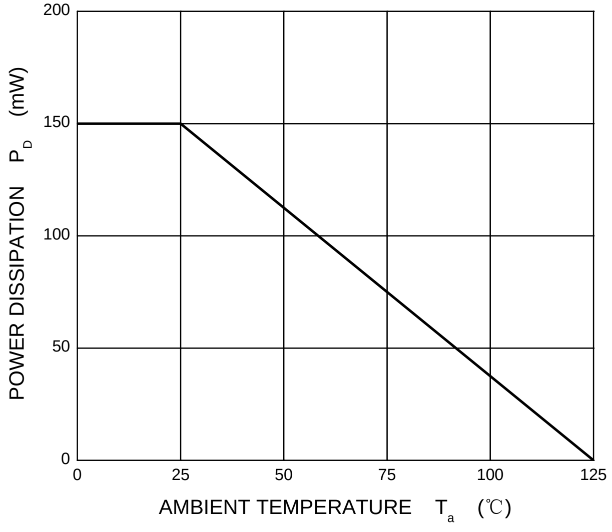
Reverse Characteristics



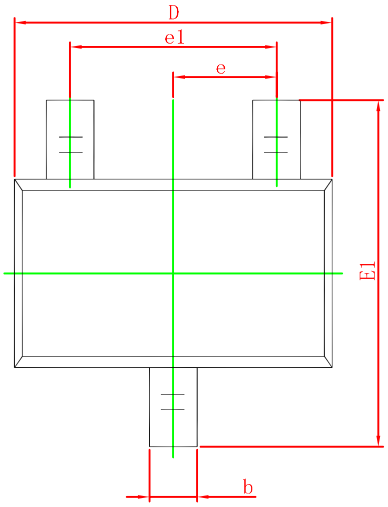
Capacitance Characteristics

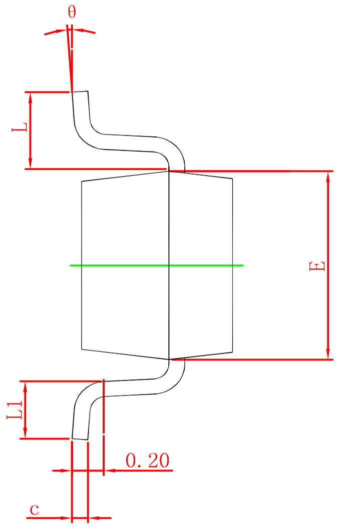


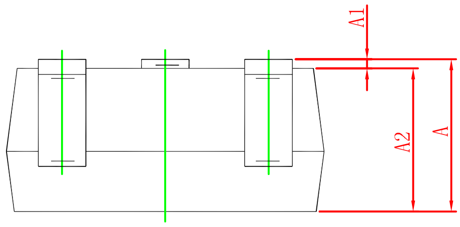
Power Derating Curve



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°