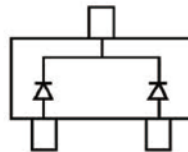


Features

- Low Forward Voltage
- Fast Switching



SOT-323



Equivalent Circuit

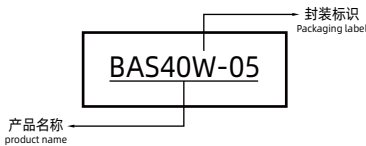
Absolute Maximum Ratings(TA=25℃)

Symbol	Parameter	Value	Unit
V _{RRM}	Peak Repetitive Peak Reverse Voltage	40	V
V _{RWM}	Working Peak Reverse Voltage		
V _R	DC Blocking Voltage		
I _{FM}	Forward Continuous Current	200	mA
P _d	Power Dissipation	150	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	667	℃/W
T _J	Operating Junction Temperature Range	-40~+125	℃
T _{stg}	Storage Temperature Range	-55~+150	℃

Electrical Characteristics (TA=25℃ unless otherwise specified)

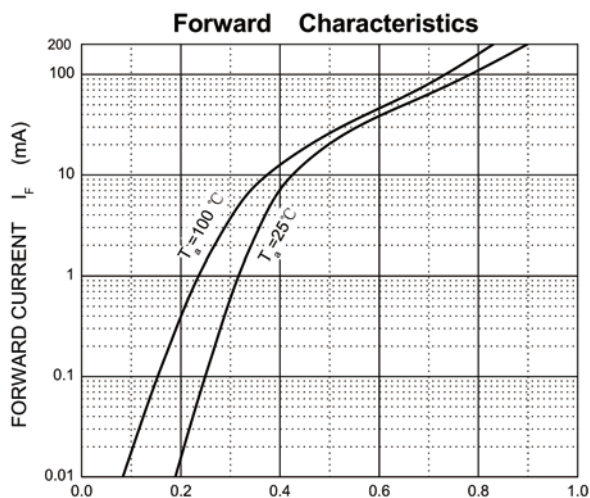
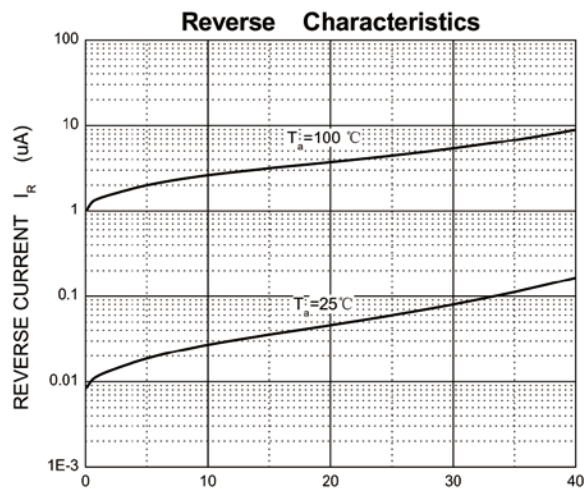
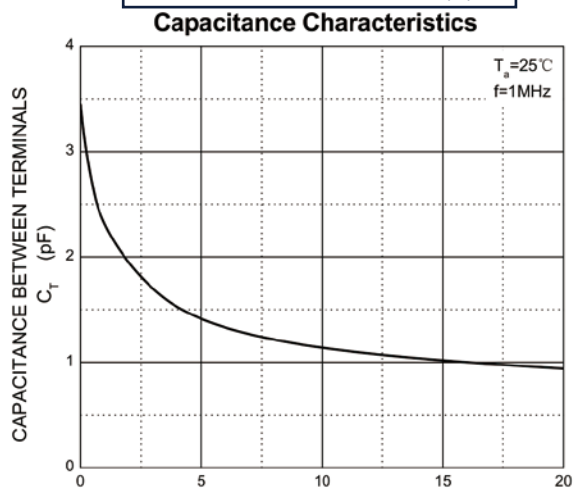
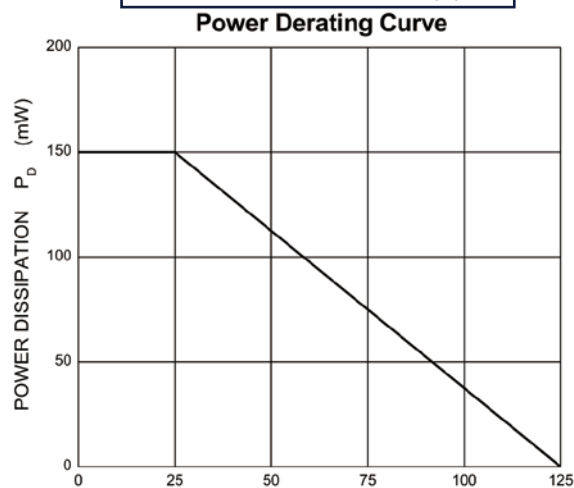
Symbol	Parameter	Test conditions	Min	Max	Unit
V _(BR)	Reverse breakdown voltage	I _R =10μA	40		V
I _R	Reverse current	V _R =30V		200	nA
V _F	Forward voltage	I _F =1mA		380	mV
		I _F =40mA		1000	mV
C _D	Diode capacitance	V _R =0V, f=1MHz		5	pF
t _{rr}	Reverse recovery time	I _{rr} =1mA, I _R =I _F =10mA, R _L =100Ω		5	nS

Ordering information

Product ID	Marking	Naming rule	Pack	Qty(PCS)
BAS40W-05	45		SOT-323	3000

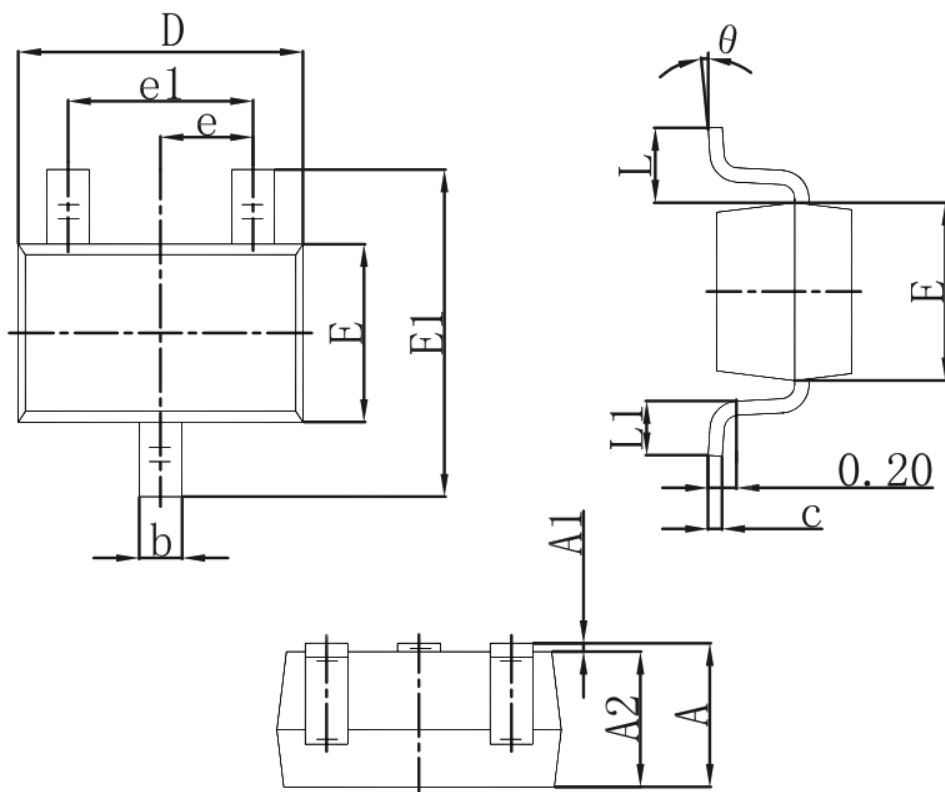


Typical Characteristics

FORWARD VOLTAGE V_F (V)REVERSE VOLTAGE V_R (V)REVERSE VOLTAGE V_R (V)AMBIENT TEMPERATURE T_a ($^\circ\text{C}$)



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	1.350	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°