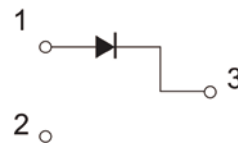


Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



SOT-323



Equivalent Circuit

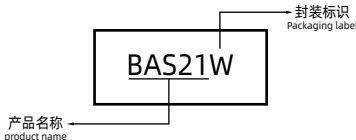
Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Peak Reverse Voltage	250	V
V_R	DC Blocking Voltage		
I_o	Average Rectified Output Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	2.5	A
P_d	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	$^{\circ}\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

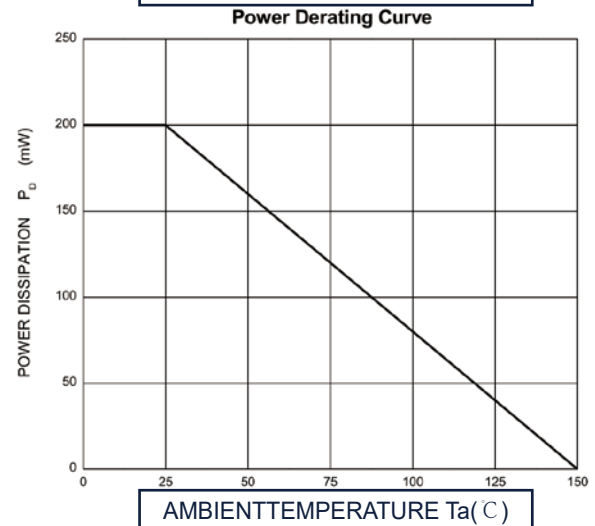
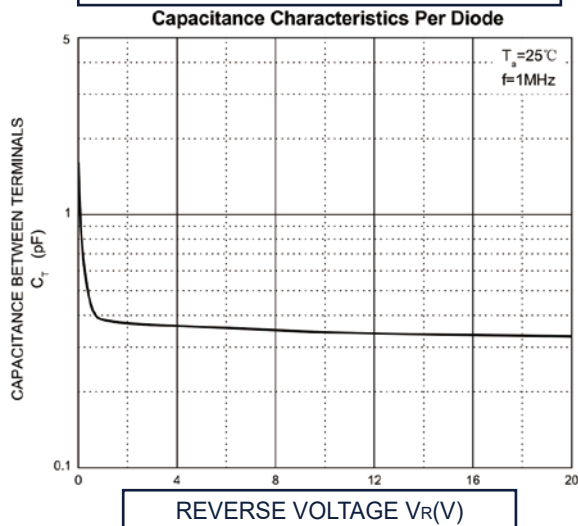
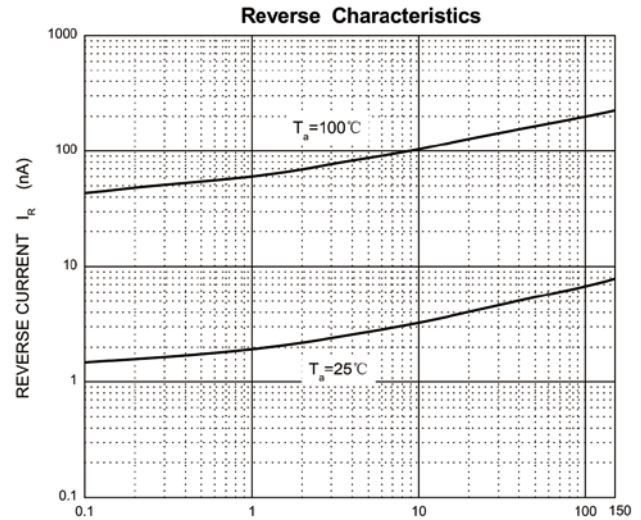
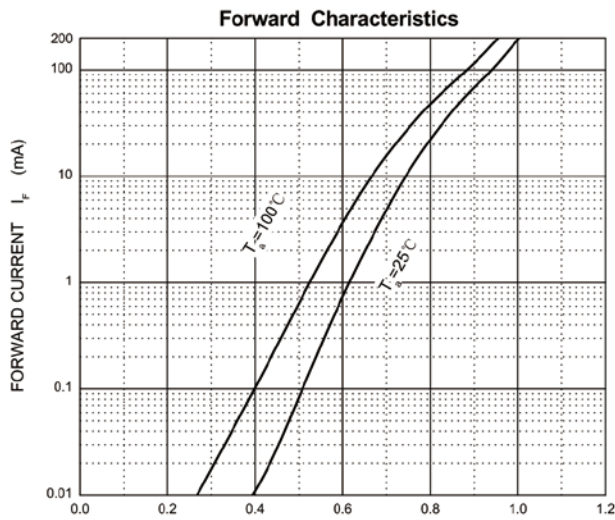
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=100\mu\text{A}$	250		V
I_R	Reverse voltage leakage current	$V_R=200\text{V}$		0.1	μA
V_F	Forward voltage	$I_F=100\text{mA}$		1	V
		$I_F=200\text{mA}$		1.25	V
C_D	Diode capacitance	$V_R=0\text{V}, f=1\text{MHz}$		5	pF
t_{rr}	Reverse recovery time	$I_F=I_R=30\text{mA}, I_{rr}=0.1 \times I_R$		50	nS

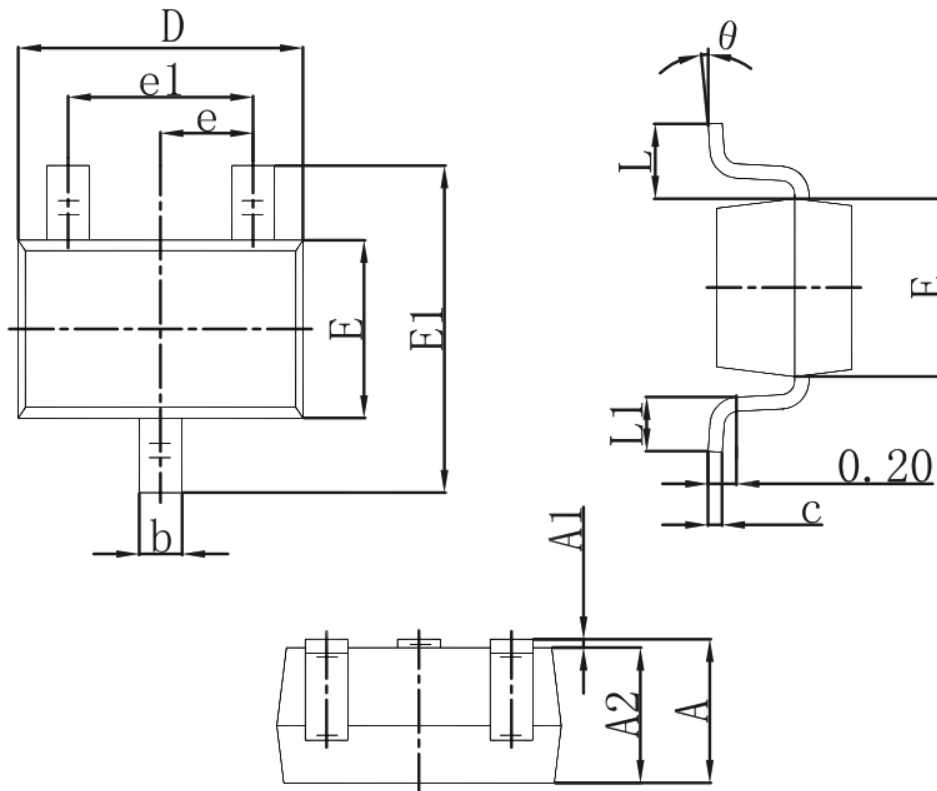
Ordering information

Product ID	Marking	Naming rule	Pack	Qty(PCS)
BAS21W	KT3		SOT-323	3000

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	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°