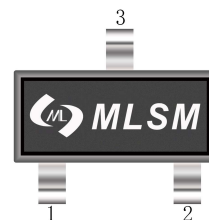
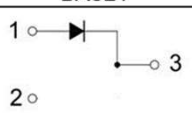
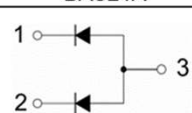
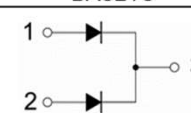
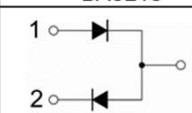
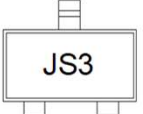
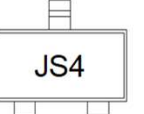


Features

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



SOT-23 top view

BAS21	BAS21A	BAS21C	BAS21S
			
Marking: JS	Marking: JS2	Marking: JS3	Marking: JS4
			



Halogen-Free

Maximum Ratings @Ta=25°C

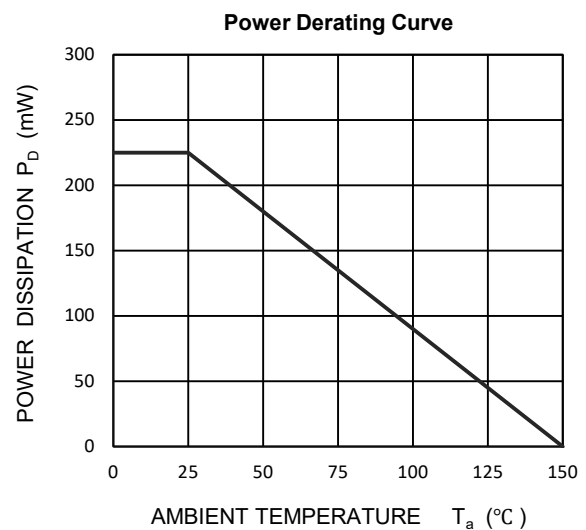
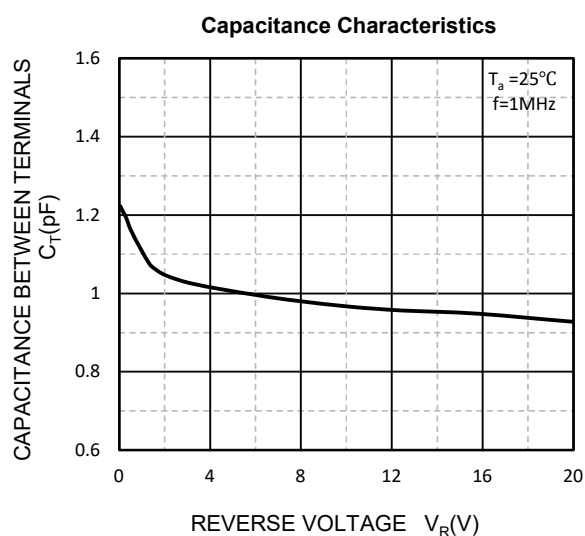
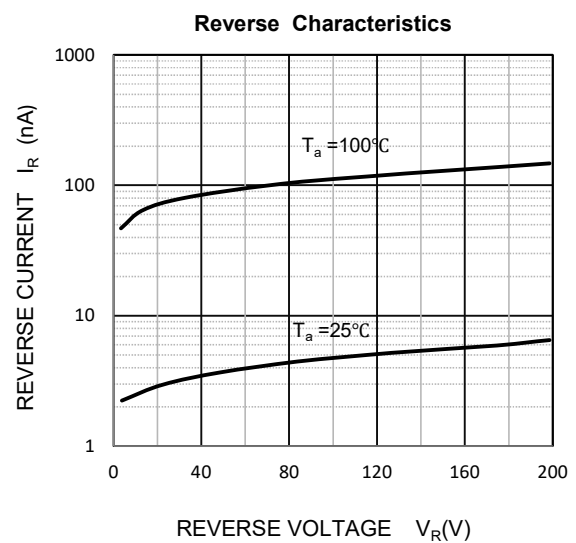
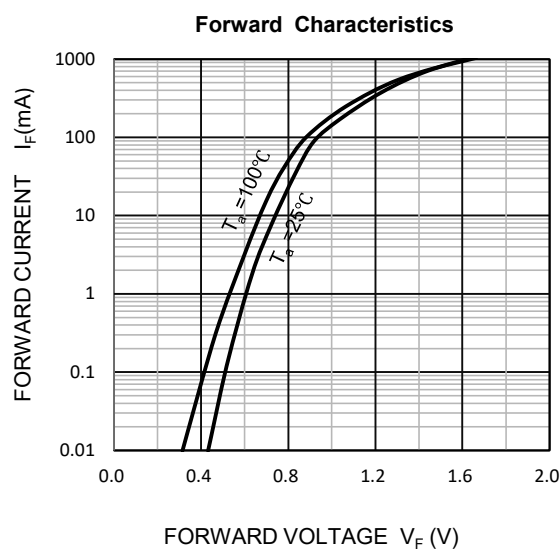
Symbol	Parameter	Value	Unit
V_R	Peak Repetitive Peak Reverse Voltage	250	V
V_{RRM}	Working Peak Reverse Voltage		
V_{RWM}	DC Blocking Voltage		
I_{FM}	Forward Continuous Current	400	mA
I_o	Average Rectified Output Current	200	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @t=8.3ms	2.5	A
I_{FRM}	Repetitive peak forward surge current	625	Ma
P_D	Power Dissipation	225	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	555	°C/W
T_J, T_{STG}	Operating and Storage Temperature Range	-55~ +150	°C

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

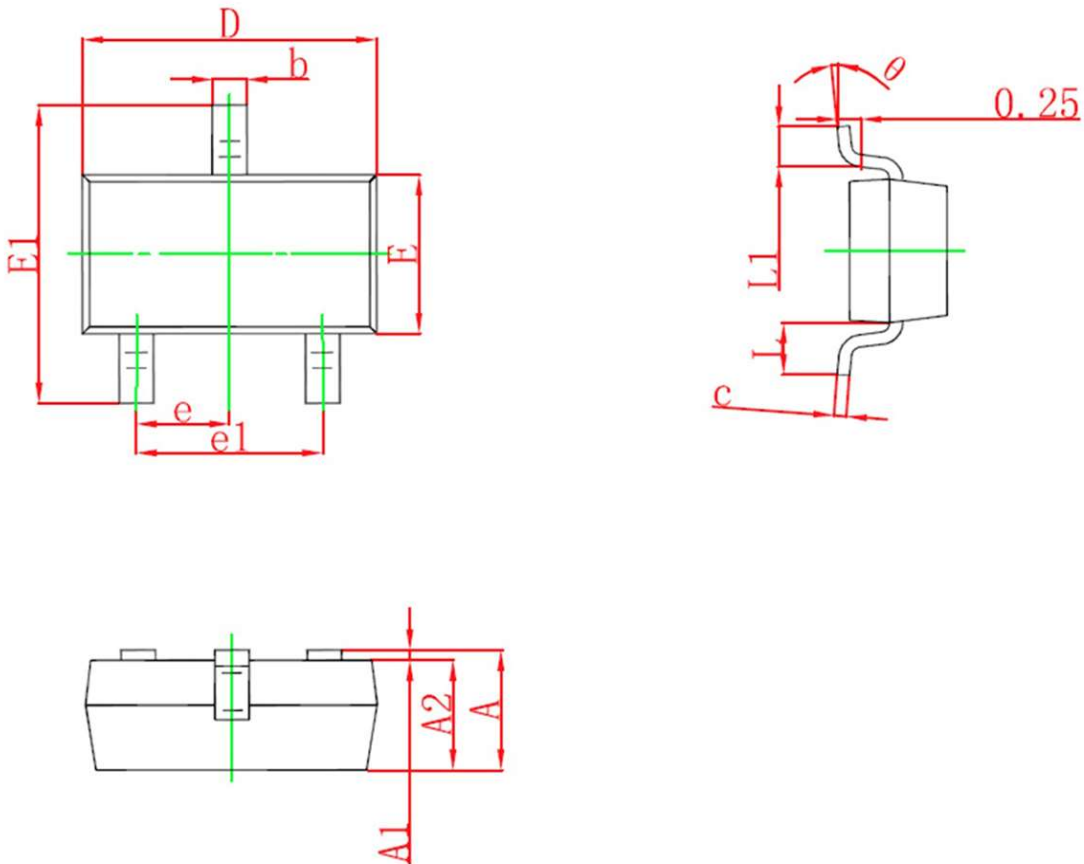
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=100\mu A$	250	--	--	V
I_R	Reverse current	$V_R=200V$	--	--	0.1	μA
V_F	Forward voltage	$I_F=100mA$	--	--	1000	mV
		$I_F=200mA$	--	--	1250	mV
C_D	Diode capacitance	$V_R=0, f=1MHz$	--	--	5	pF
t_{rr}	Reverse recovery time	$I_F=I_R=30mA, I_{tr}=0.1I_R, R_L=100\Omega$	--	--	50	ns

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
BAS21	SOT-23	JS	3,000	45,000	180,000	7"reel
BAS21A	SOT-23	JS2	3,000	45,000	180,000	7"reel
BAS21C	SOT-23	JS3	3,000	45,000	180,000	7"reel
BAS21S	SOT-23	JS4	3,000	45,000	180,000	7"reel

Typical Operating Characteristics


SOT-23 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E1	2.250	2.550	0.088	0.100
E	1.200	1.400	0.047	0.055
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°