

# BAS21 A/C/S

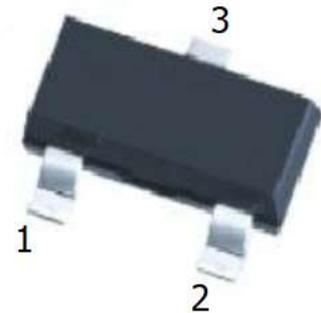
## BAS21 A/C/S Fast Switching Diode

### General description

SOT-23 Plastic-Encapsulate Switching Diode

### FEATURES

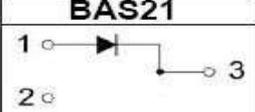
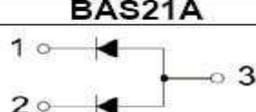
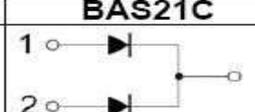
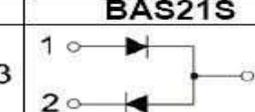
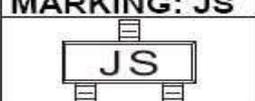
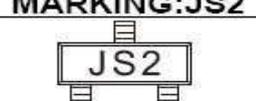
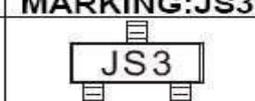
- Fast Switching Device (TRR <50 nS)
- Power Dissipation of 225mW
- High Stability and High Reliability Green EMC
- Low reverse leakage



Package SOT-23

Absolute Maximum Ratings  $T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	225	mW
$T_{STG}$	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	+150	$^\circ\text{C}$
$V_{RSM}$	Non-Repetitive Peak Reverse Voltage	250	V
$V_{RRM}$	Repetitive Peak Reverse Voltage	250	V
$I_{FRM}$	Repetitive Peak Forward Current	625	mA
$I_O$	Continuous Forward Current	400	mA
$I_{FSM}$	Peak Forward Surge Current ( $T=8.3\text{ms}$ )	2.5	A

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

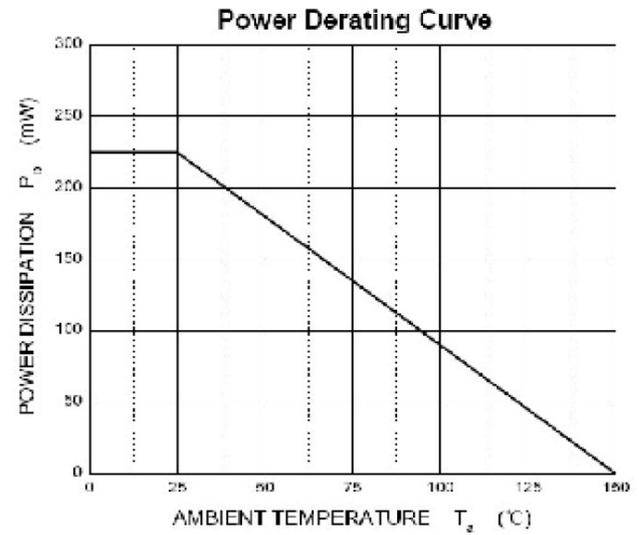
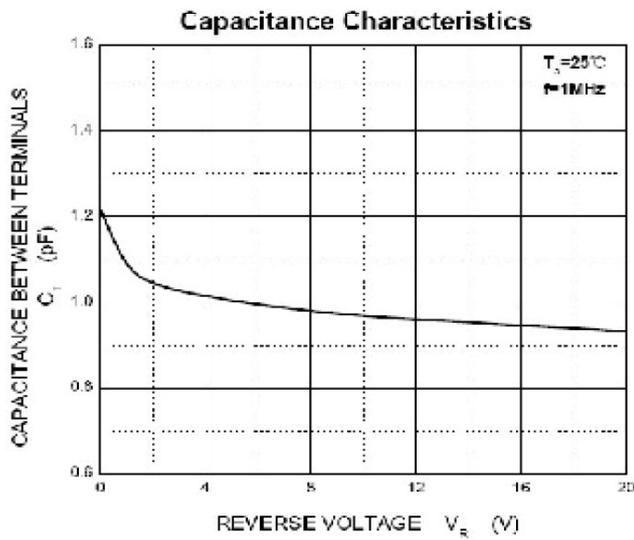
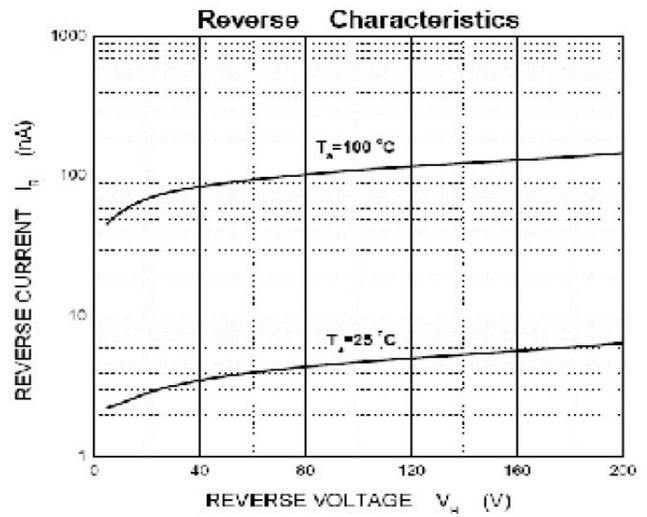
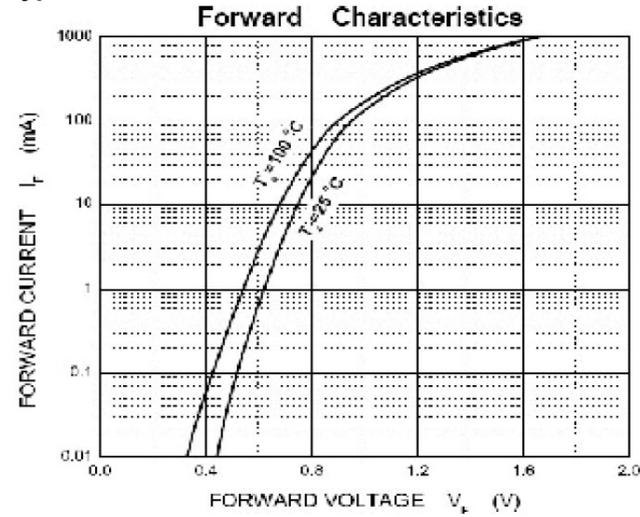
### Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

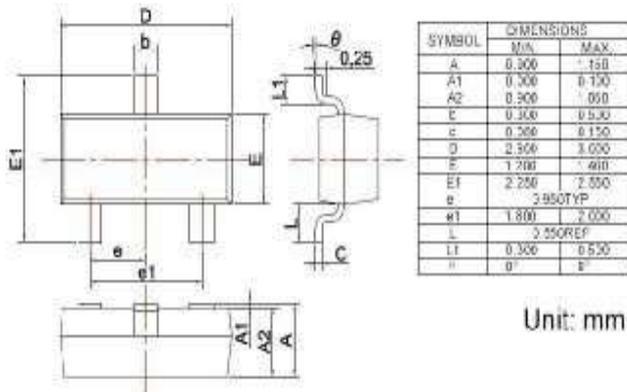
Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
V(BR)	Reverse Voltage	$I_R=100\mu\text{A}$	250		V
$I_R$	Reverse Leakage Current	$V_R=200$	---	1	$\mu\text{A}$
V <sub>F</sub>	Forward Voltage	$I_F=100\text{mA}$	---	1	V
		$I_F=200\text{mA}$	---	1.25	
TRR	Reverse Recovery Time	$I_F= I_R=30\text{mA}$	---	50	nS
		$R_L=100\Omega$			
		$I_{RR}=0.1 \times I_R$			
CT	Capacitance	$V_R=0\text{V}, f=1\text{MHz}$	---	5	pF

# BAS21 A/C/S

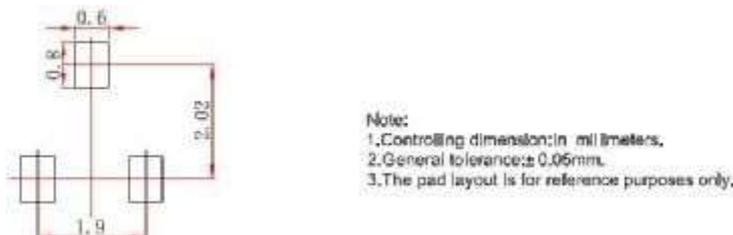
## Typical Performance Characteristics



## SOT-23 PACKAGE OUTLINE



## PCB Design(Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs)



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