

»Features

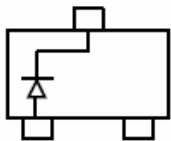
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



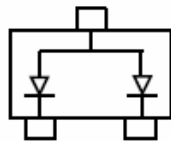
SOT-23

»General Description

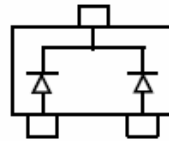
- SOT-23 Small Outline Plastic Package
- Mounting Position: Any



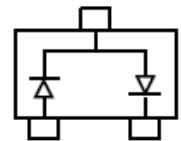
BAS21:JS



BAS21A :JS 2



BAS21C :JS3



BAS21S :JS4

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

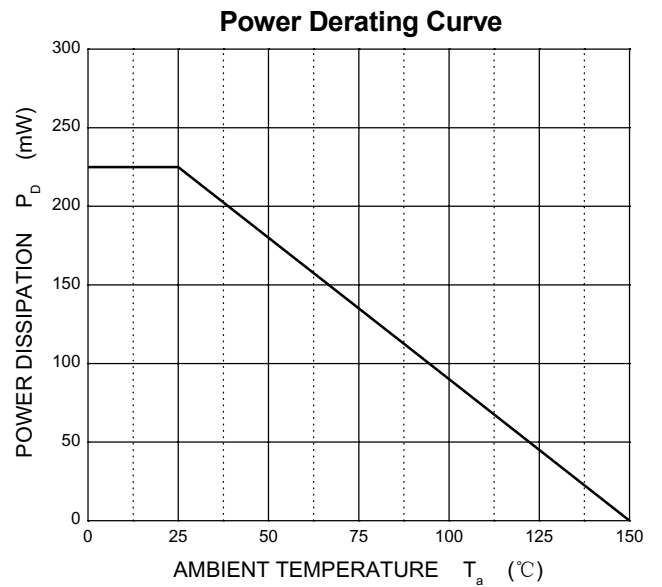
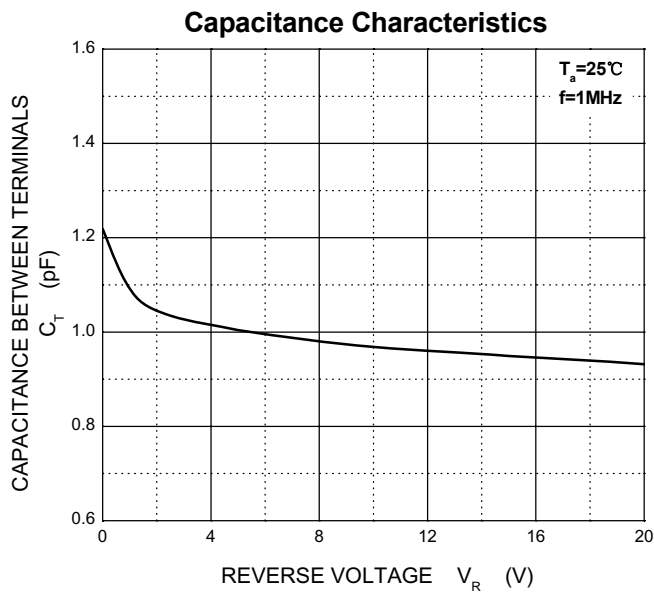
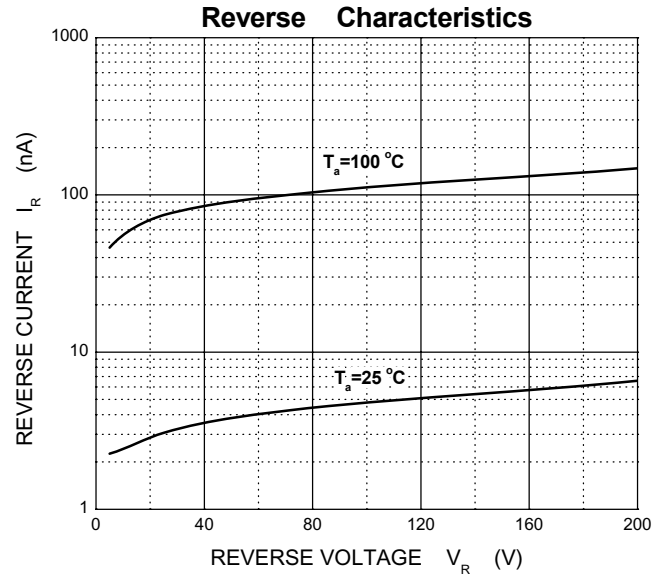
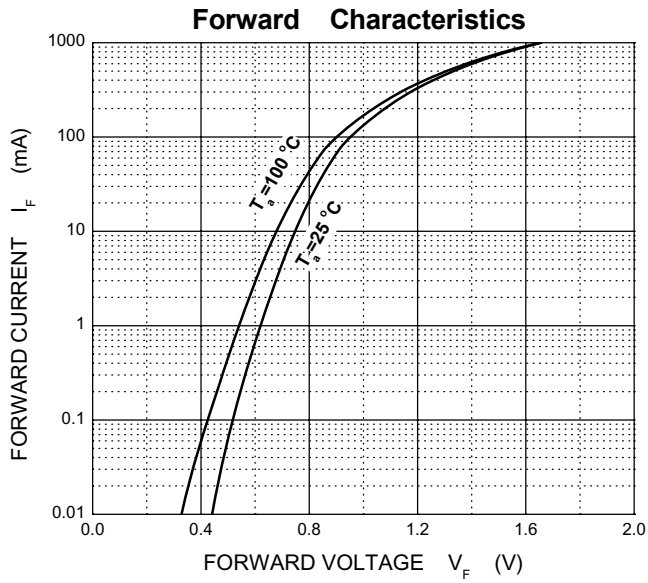
Parameter	Symbol	Limit	Unit
Repetitive peak reverse voltage	V_{RRM}	250	V
Working peak reverse voltage	V_{RWM}		
DC blocking voltage	V_R		
Forward continuous current	I_{FM}	400	mA
Average rectified output current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	2.5	A
Repetitive peak forward surge current	I_{FRM}	625	mA
Power dissipation	P_D	225	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	555	$^{\circ}\text{C}/\text{W}$
Junction temperature	T_J	150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55~+150	$^{\circ}\text{C}$

Valid provided that electrodes are kept at ambient temperature.

» **Electrical Characteristics** @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

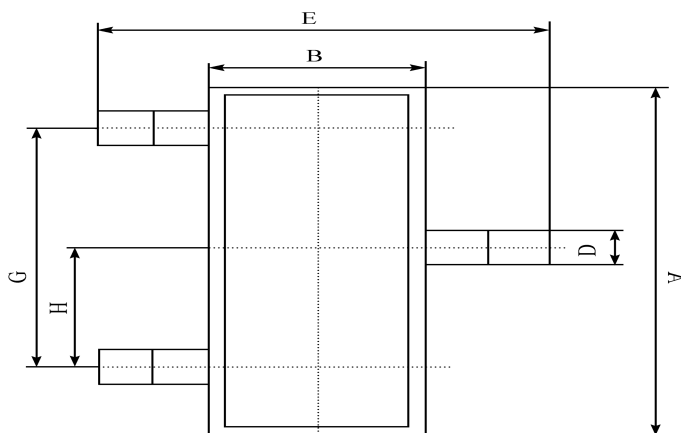
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	250		V
Reverse voltage leakage current	I_R	$V_R=200\text{V}$		0.1	μA
Forward voltage	V_F	$I_F=100\text{mA}$ $I_F=200\text{mA}$		1000 1250	mV
Diode capacitance	C_D	$V_R=0\text{V}$, $f=1\text{MHz}$	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

»Typical Performance Characteristics (T_J = 25 °C, unless otherwise noted)

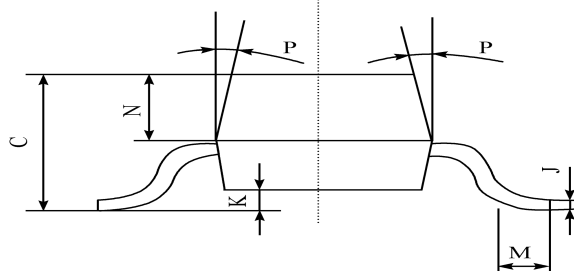


»Package Information

SOT-23



A	2.90 ± 0.10
B	1.30 ± 0.10
C	1.00 ± 0.10
D	0.40 ± 0.10
E	2.40 ± 0.20
G	1.90 ± 0.10
H	0.95 ± 0.05
J	0.13 ± 0.05
K	0.00-0.10
M	≥ 0.2
N	0.60 ± 0.10
P	7 ± 2°



»Ordering information

Order code	Package	Marking	Base qty	Delivery mode
BAS21	SOT-23	JS	3K	Tape and reel
BAS21A	SOT-23	JS2	3K	Tape and reel
BAS21C	SOT-23	JS3	3K	Tape and reel
BAS21S	SOT-23	JS4	3K	Tape and reel