

Surface mount switching diode

BAS21/A/C/S

FEATURES

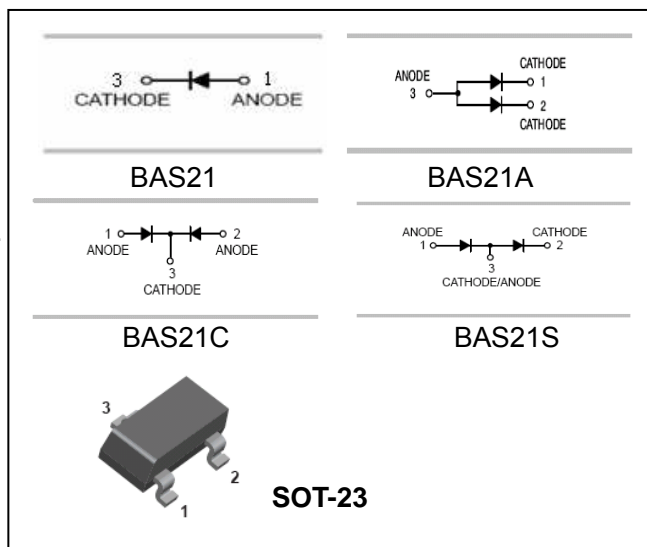
- Fast switching speed.
- Surface mount package ideally suited for Automatic insertion.
- For general purpose switching applications.
- High conductance.



Lead-free

APPLICATIONS

- High speed switching application.



ORDERING INFORMATION

Type No.	Marking	Package Code
BAS21	JS	SOT-23
BAS21A	JS2	SOT-23
BAS21C	JS3	SOT-23
BAS21S	JS4	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	250	V
Working Peak Reverse Voltage	V_{RWM}	200	V
DC Reverse Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	141	V
Forward Continuous Current	I_F	200	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	@t=8.3ms	A
		@t=1.0 ms	A
Power Dissipation	P_d	250	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	°C/W
Operating Junction Temperature Range	T_j	150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

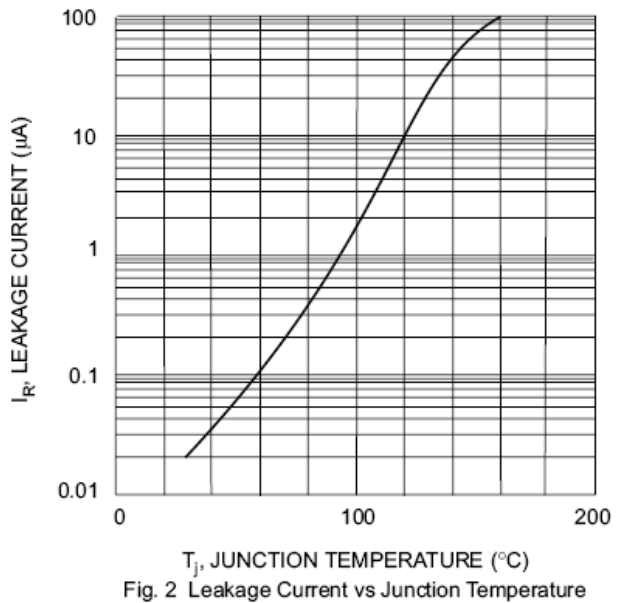
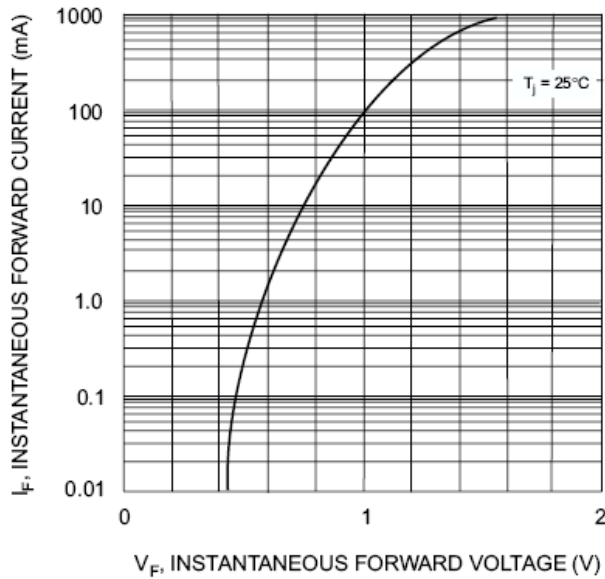
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ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	MAX	UNIT	Test Condition
Reverse breakdown Voltage	$V_{(BR)R}$	250	-	V	$I_R=100\mu\text{A}$
Reverse Leakage Current	I_R	-	0.1 15	μA	$V_R=200\text{V}, T_J=25^\circ\text{C}$ $V_R=200\text{V}, T_J=100^\circ\text{C}$
Forward voltage	V_F	-	1000 1250	mV	$I_F=100\text{mA}$ $I_F=200\text{mA}$
Diode Capacitance	C_D	-	5.0	pF	$V_R=0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	-	50	ns	$I_F=I_R=10\text{mA}$ $I_{tr}=0.1 \cdot I_R$

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



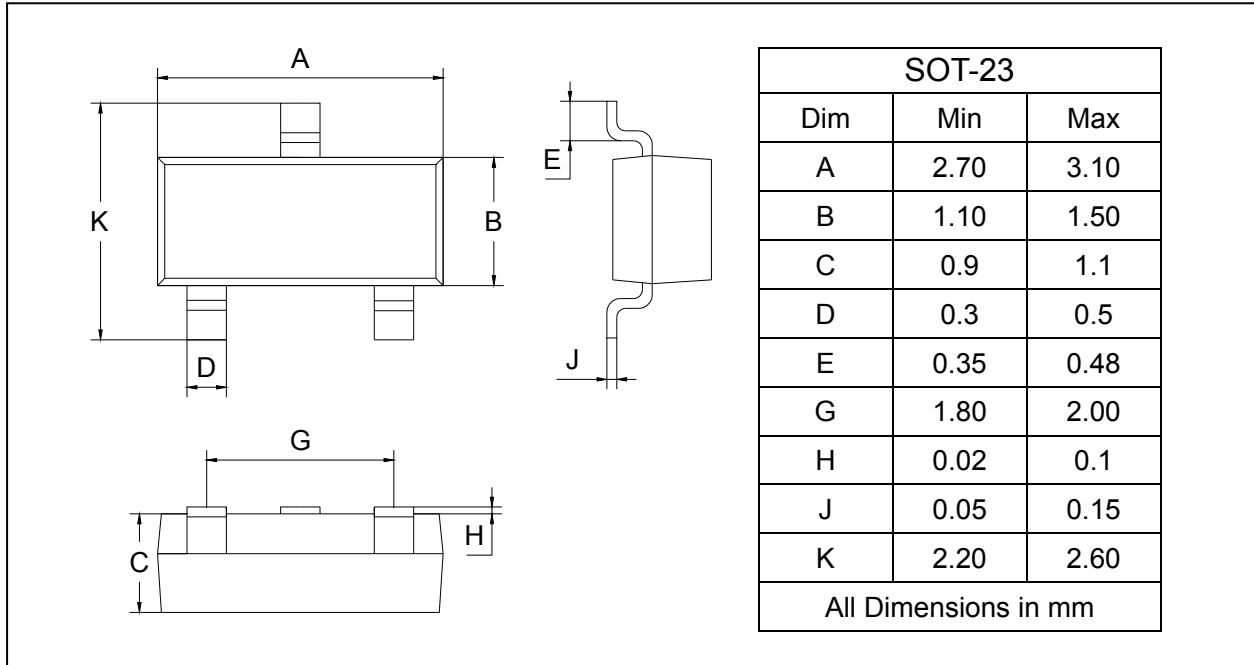
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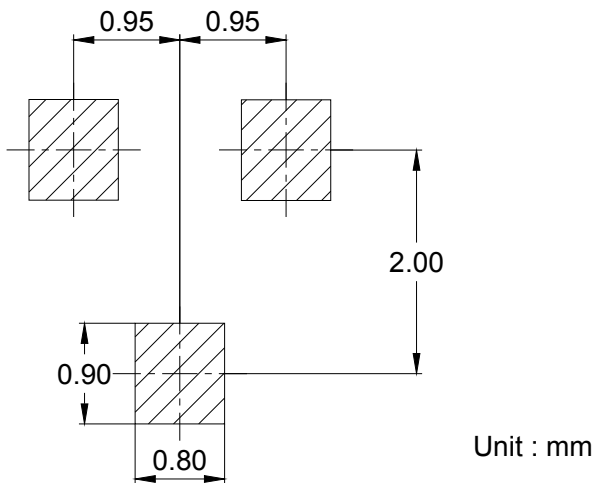
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
BAS21/A/C/S	SOT-23	3000/Tape&Reel