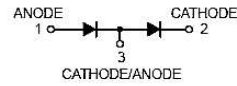


Features

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



Schematic Diagram



SOT-23

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	250	V
Working Peak Reverse Voltage	V_{RWM}	200	V
DC Reverse Voltage	V_R	200	V
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	2
		@t=1.0 ms	2.5
Power Dissipation	P_d	250	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Thermal Resistance Junction to Case	$R_{\theta JC}$	310	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

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

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

Typical Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

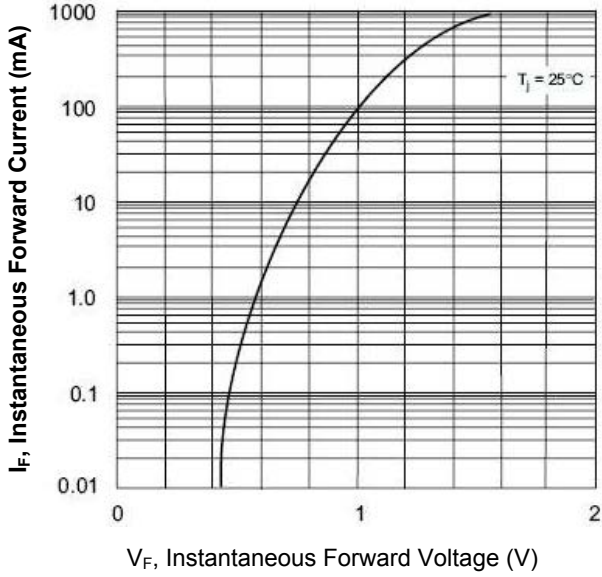


Figure 1. Forward Characteristics

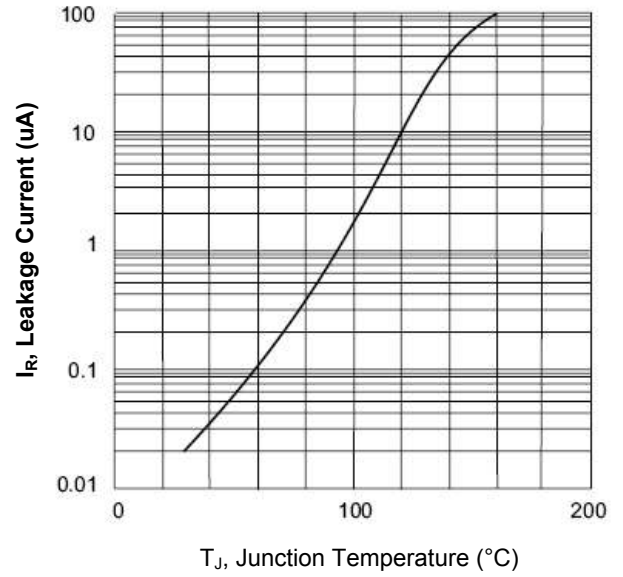
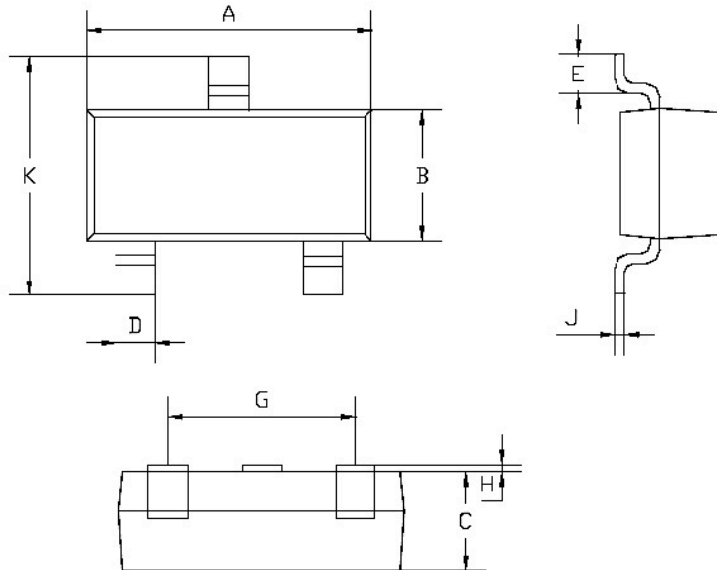


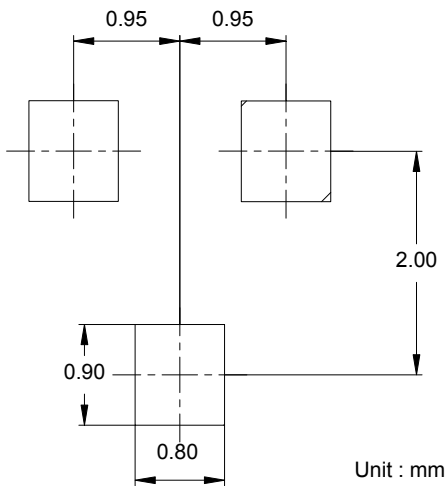
Figure 2. Leakage Current vs. Junction Temperature

Package Outline Dimensions (SOT-23)



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	0.90	1.10
D	0.30	0.50
E	0.35	0.48
G	1.80	2.00
H	0.02	0.10
J	0.05	0.15
K	2.20	2.60
All Dimensions in mm		

Recommended Pad Layout



Order Information

Device	Package	Marking	Carrier	Quantity
GSBAS21S	SOT-23	JS4	Tape & Reel	3,000pcs