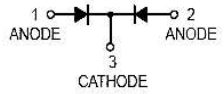
GOOD-ARK
SEMICONDUCTOR

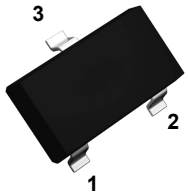
GSBAS21C
Switching Diode

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°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	@t=8.3ms	I_{FSM}	2	A
	@t=1.0 ms		2.5	
Power Dissipation		P_d	250	mW
Thermal Resistance Junction to Ambient		$R_{\theta JA}$	500	°C/W
Thermal Resistance Junction to Case		$R_{\theta JC}$	310	°C/W
Operating Junction Temperature Range		T_J	150	°C
Storage Temperature Range		T_{STG}	-65 to +150	°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

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

Typical Characteristic Curves (T_A = 25°C unless otherwise noted)

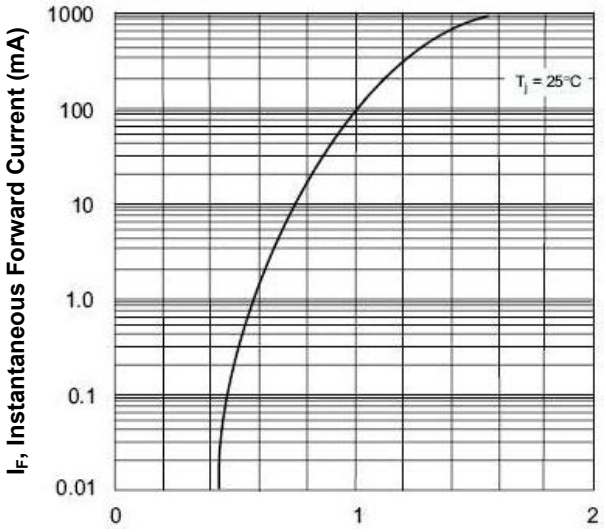


Figure 1. Forward Characteristics

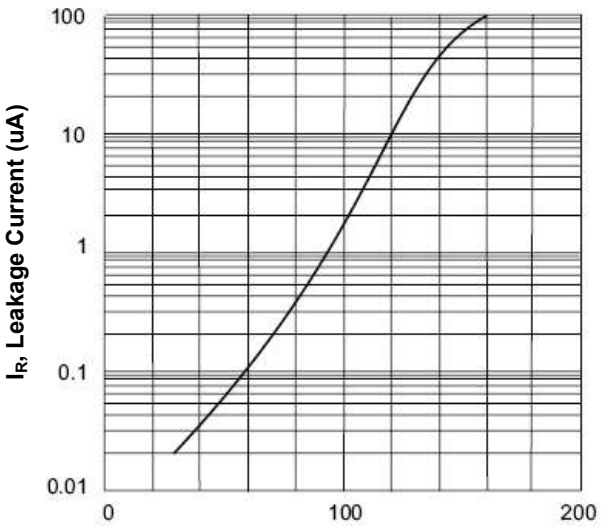
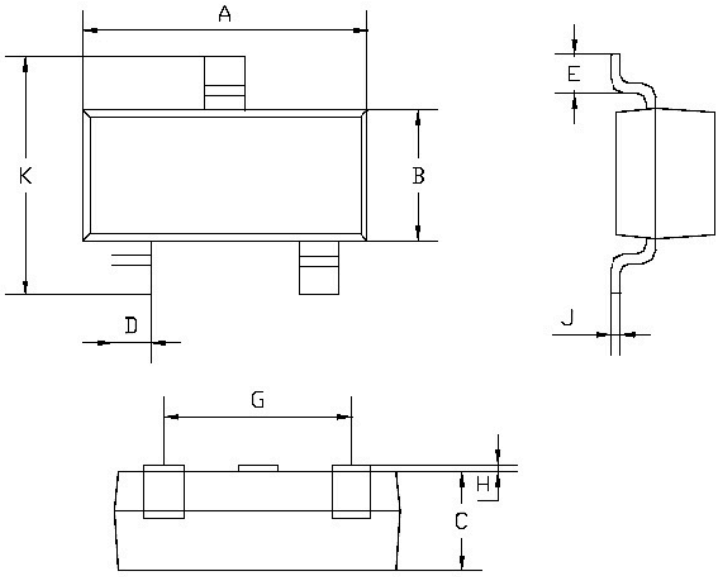


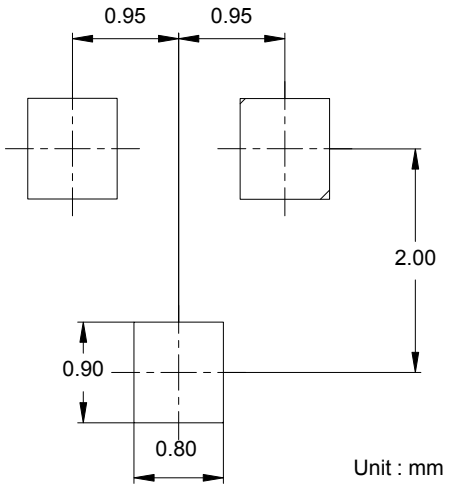
Figure 2. Leakage Current vs. Junction Temperature

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	Packaging	SPQ
GSBAS21C	SOT-23	JS3	Tape & Reel	3,000 Pcs / Reel