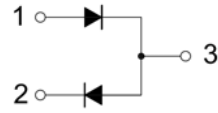
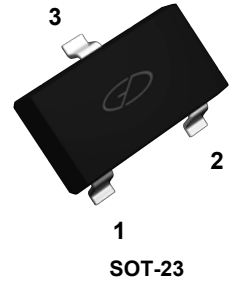


Features

- Fast switching speed
- For general purpose switching applications
- High conductance
- Low current leakage
- Small outline surface mount package
- Rohs compliant / Green EMC



Schematic Diagram



1
SOT-23

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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	70	V
Forward Current	I_F	500	mA
Non-Repetitive Peak Forward Surge Current ¹	I_{FSM}	1.0	A
Power Dissipation	P_D	250	mW
Operating Junction Temperature Range	T_J	-55 To +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 To +150	$^{\circ}\text{C}$

Note1. 8.3 ms single half sine-wave

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

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse Breakdown Voltage	V_R	$I_R=100\mu\text{A}$	70	-	V
Forward Voltage	V_F	$I_F=1\text{mA}$	-	0.9	V
		$I_F=10\text{mA}$	-	1.0	V
		$I_F=50\text{mA}$	-	1.1	V
		$I_F=150\text{mA}$	-	1.25	V
Reverse Voltage Leakage Current	I_R	$V_R=70\text{V}$	-	5.0	nA
Diode Capacitance	C_D	$V_R=0\text{V}, f=1\text{MHz}$	-	2.0	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}$	-	3.0	μS

Ratings and Characteristic Curves

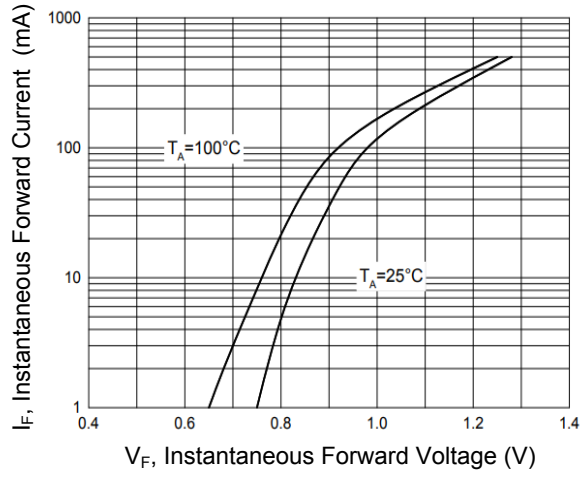


Figure 1. Forward Characteristics

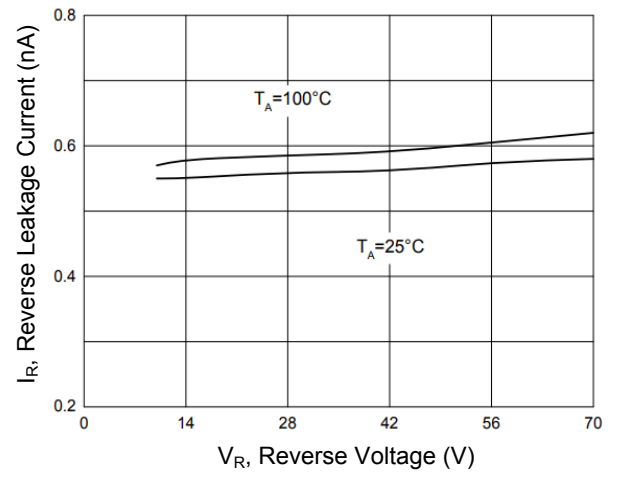


Figure 2. Reverse Characteristics

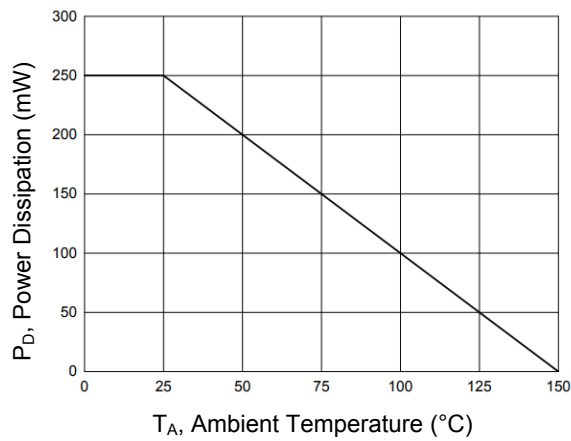
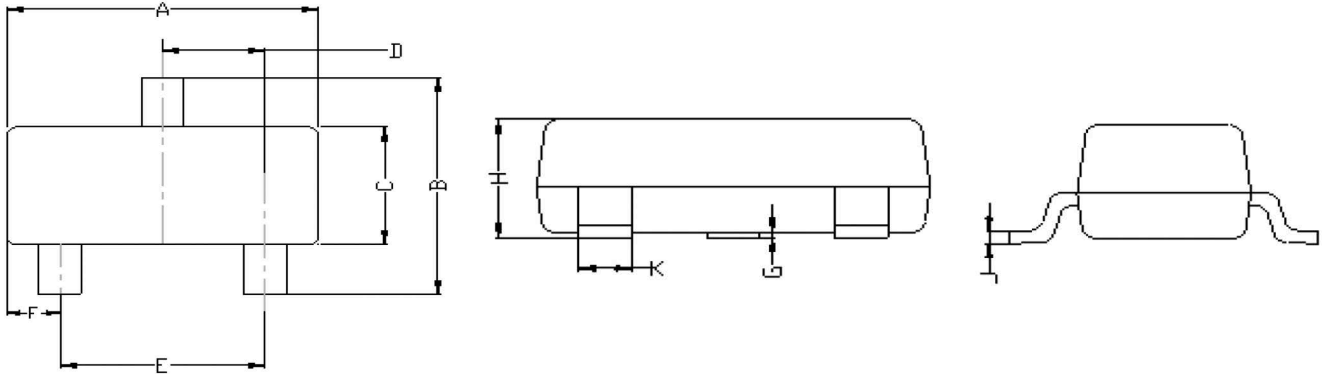


Figure 3. Power Derating Curve

Package Outline Dimensions (SOT-23)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.800	3.040	0.110	0.120
B	2.100	2.640	0.083	0.104
C	1.200	1.400	0.047	0.055
D	0.890	1.030	0.035	0.041
E	1.780	2.050	0.070	0.081
F	0.450	0.600	0.018	0.024
G	0.013	0.100	0.001	0.004
H	0.900	1.110	0.035	0.044
J	0.090	0.180	0.004	0.007
K	0.370	0.510	0.015	0.020

Order Information

Device	Package	Marking	Carrier	Quantity
GSBAV199	SOT-23	JY	Tape & Reel	3,000pcs / Reel