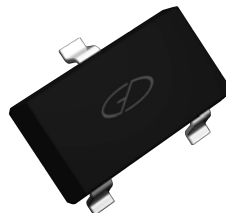
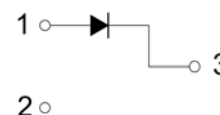


Features

- High switching speed
- Low forward voltage
- Guard ring protected



SOT-23



Schematic Diagram

Applications

- Voltage clamping
- Circuits protection

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

Parameter	Symbol	Max.	Unit
DC Blocking Voltage	V_R	40	V
Continuous Forward Current	I_o	500	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	2	A
Power Dissipation	P_D	350	mW
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	286	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 To +150	$^{\circ}\text{C}$

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	40	-	-	V
Reverse Current	I_R	$V_R=35\text{V}$	-	-	100	μA
Forward Voltage	V_F	$I_F=500\text{mA}$	-	-	550	mV

Typical Electrical and Thermal Characteristic Curves

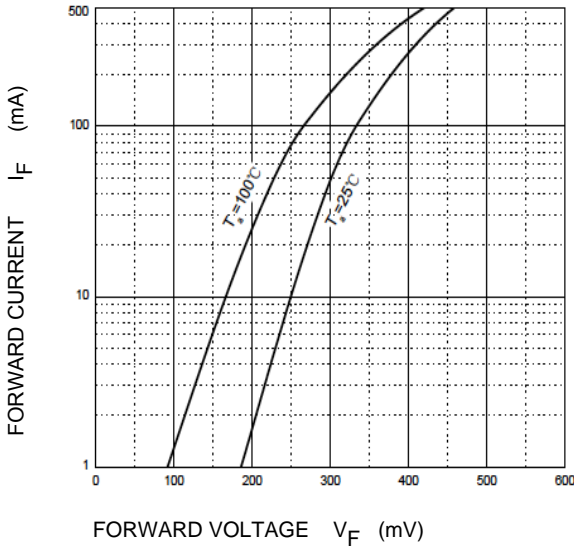


Figure 1. Forward Characteristics

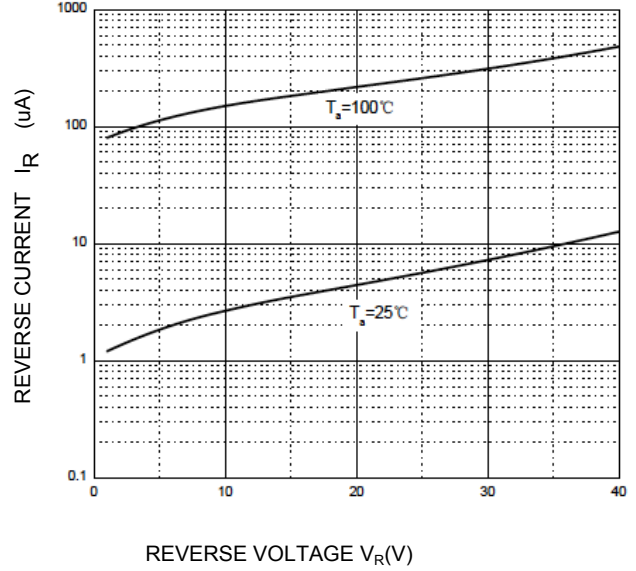


Figure 2. Reverse Characteristics

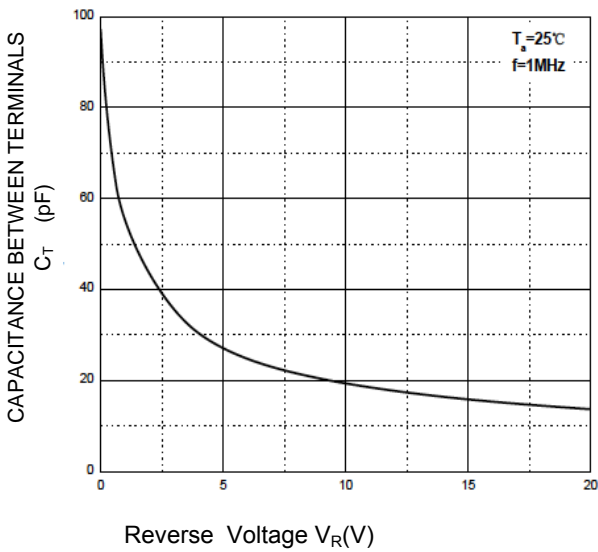


Figure 3. Capacitance Characteristics

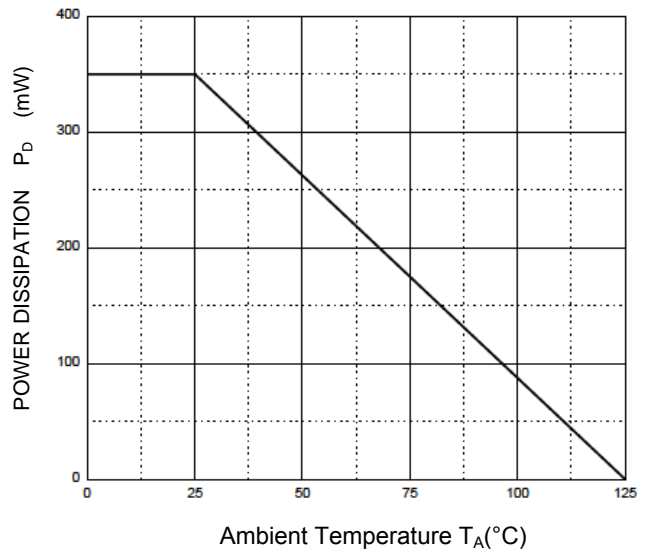
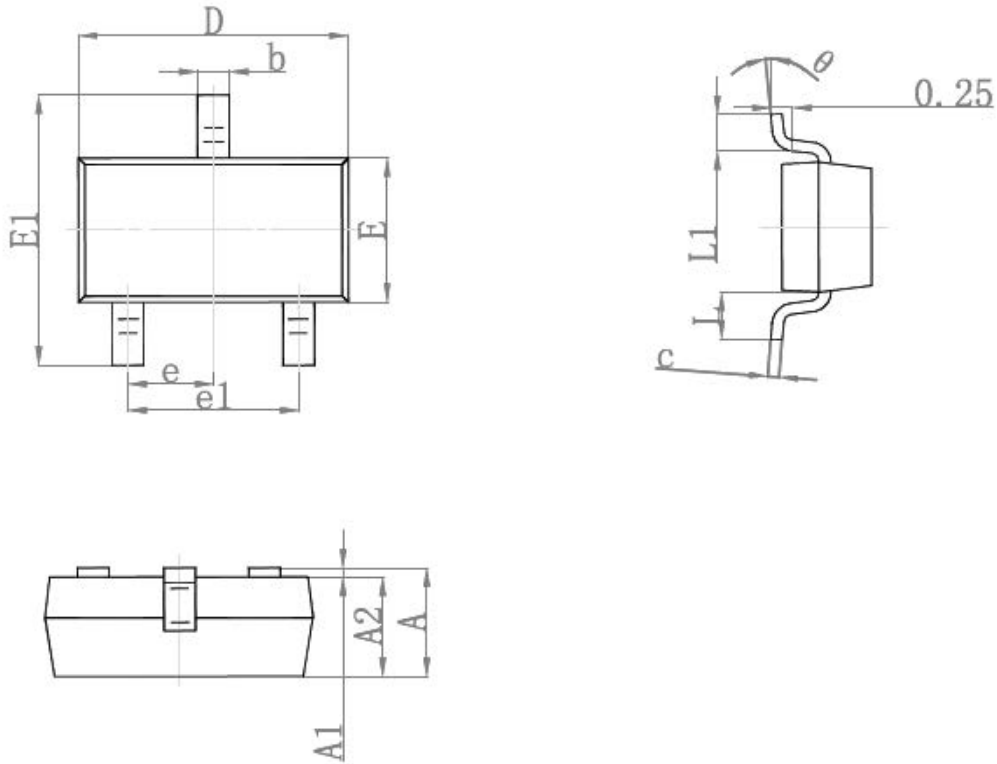


Figure 4. Power Derating Curve

Package Outline Dimensions (SOT-23)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°