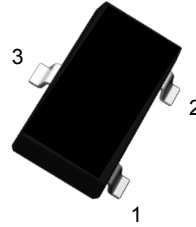
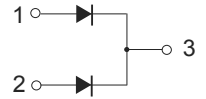


Features

- High speed
- Suitable for high packing density layout
- High reliability



SOT-523



Schematic Diagram

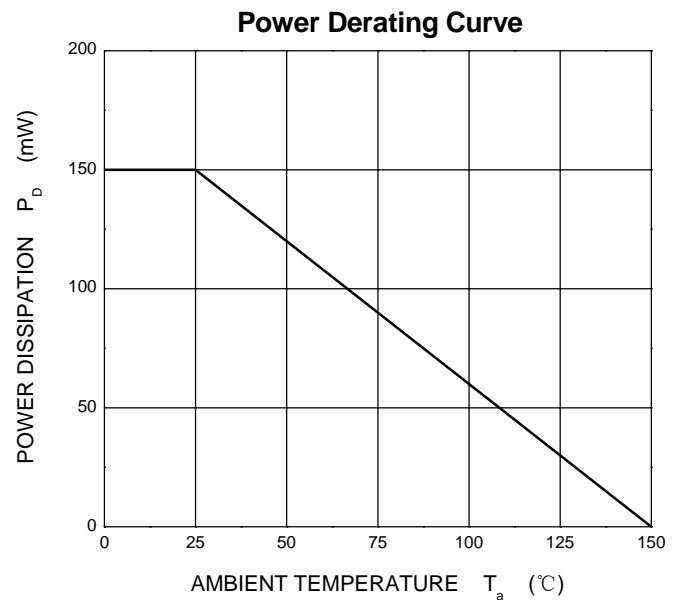
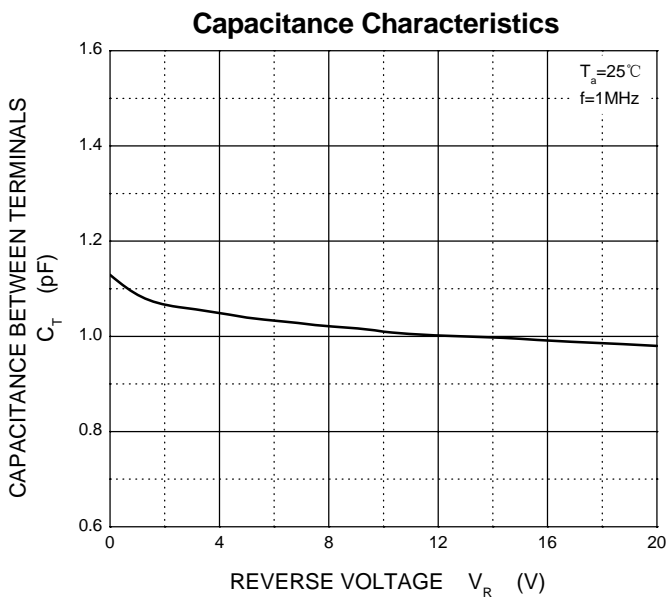
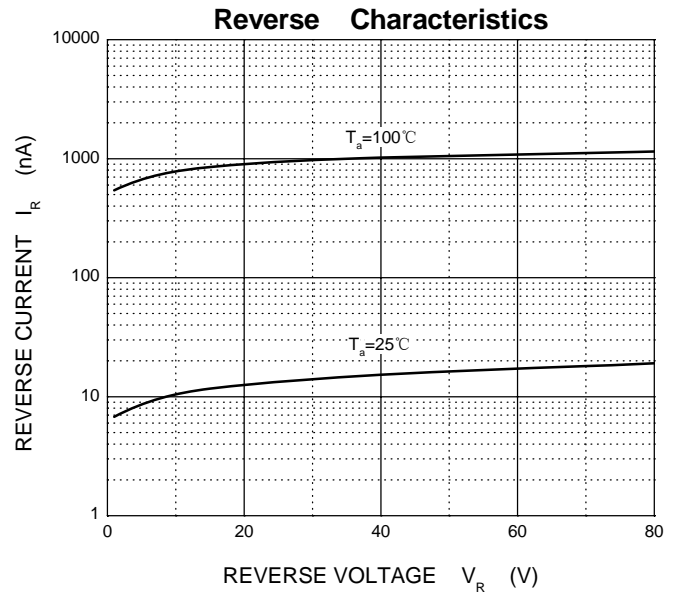
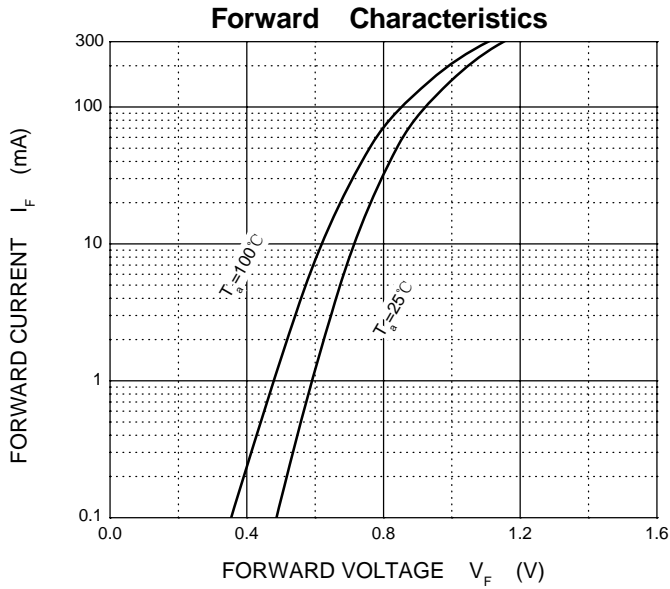
Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	80	V
DC Blocking Voltage	V_R	80	V
Forward Continuous Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	2.0	A
Average Rectified Output Current	I_O	100	mA
Power Dissipation	P_D	150	mW
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	833	$^{\circ}\text{C/W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

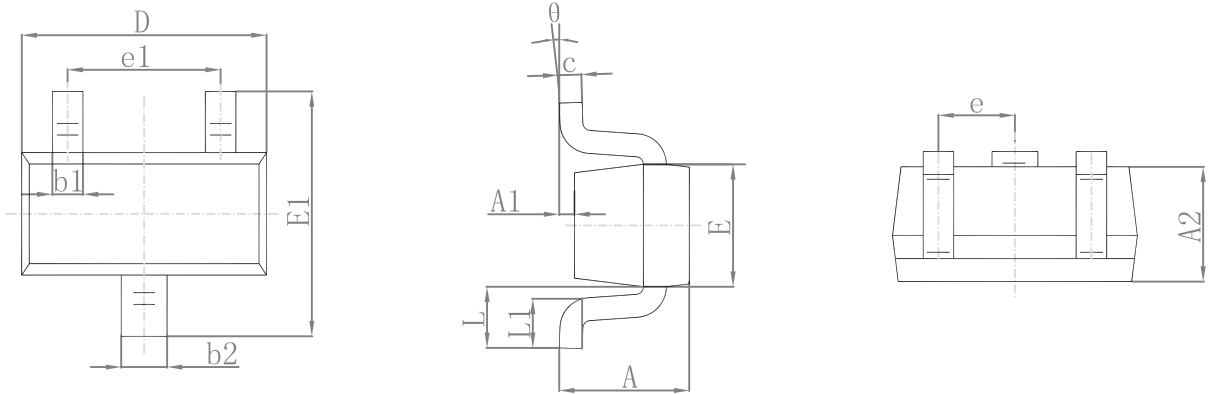
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R = 100\mu\text{A}$	80	-	V
Reverse Voltage Leakage Current	I_R	$V_R = 70\text{V}$	-	0.1	μA
Forward Voltage	V_F	$I_F = 100\text{mA}$	-	1.2	V
Diode Capacitance	C_D	$V_R = 0, f = 1\text{MHz}$	-	3.5	pF
Reverse Recovery Time	t_{rr}	$V_R = 6\text{V}, I_F = I_R = 5\text{mA}$	-	4	ns

Typical Characteristics Curves

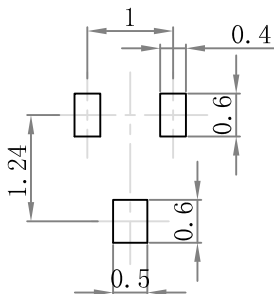


Package Outline Dimensions SOT-523



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSDAN222	SOT-523	N	Tape & Reel	3000pcs / Reel	RoHS compliant