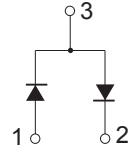
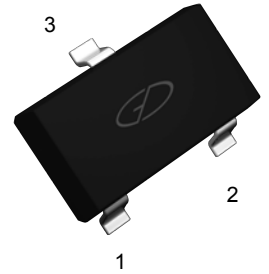


## Features

- Dual switching diodes
- Epitaxial planar process
- Fast switching
- High voltage capability



Schematic Diagram



SOT-323

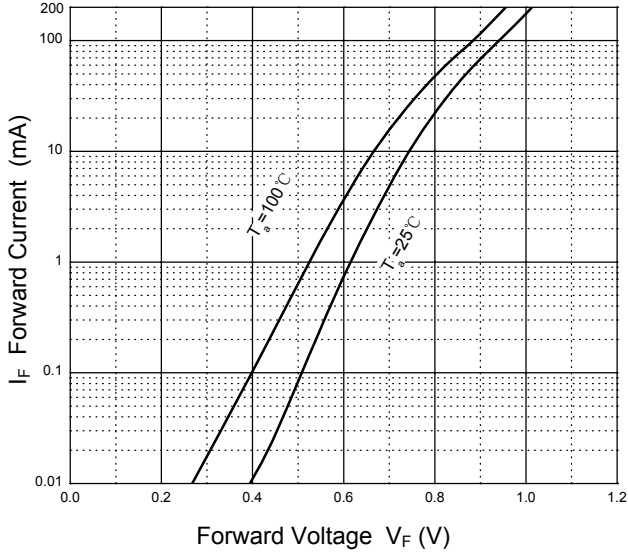
## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Non-repetitive Peak Reverse Voltage	V <sub>RM</sub>	300	V
Continuous Reverse Voltage	V <sub>R</sub>	240	V
Average Forward Current	I <sub>F</sub>	200	mA
Continuous Forward Current	I <sub>F</sub>	225	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	625	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	2.5	A
Power Dissipation	P <sub>D</sub>	250	mW
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	500	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	

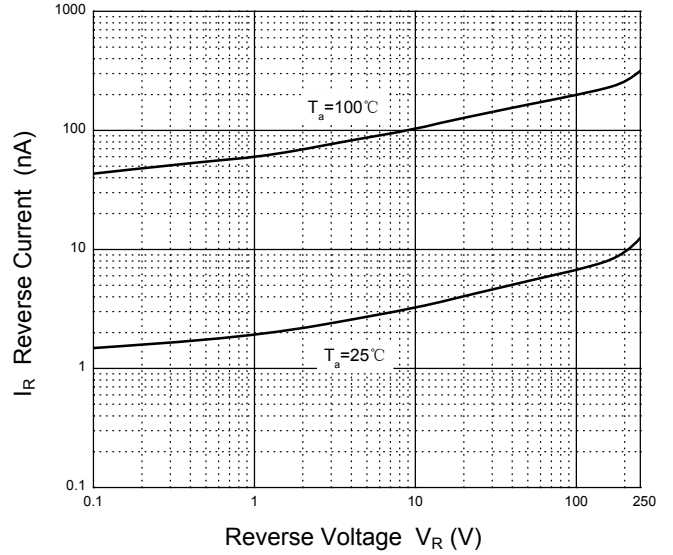
## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse Breakdown Voltage	V <sub>(BR)</sub>	I <sub>R</sub> =100μA	240	-	V
Reverse Voltage Leakage Current	I <sub>R</sub>	V <sub>R</sub> =240V	-	0.1	mA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =100mA	-	1	V
Diode Capacitance	C <sub>D</sub>	V <sub>R</sub> =0V, f=1MHz	-	5	pF
Reveres Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =30mA, R <sub>L</sub> =100Ω	-	50	ns

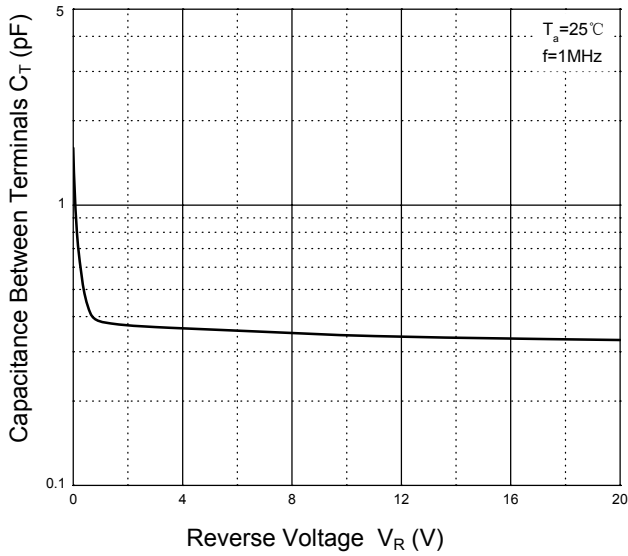
**Typical Characteristic Curves**



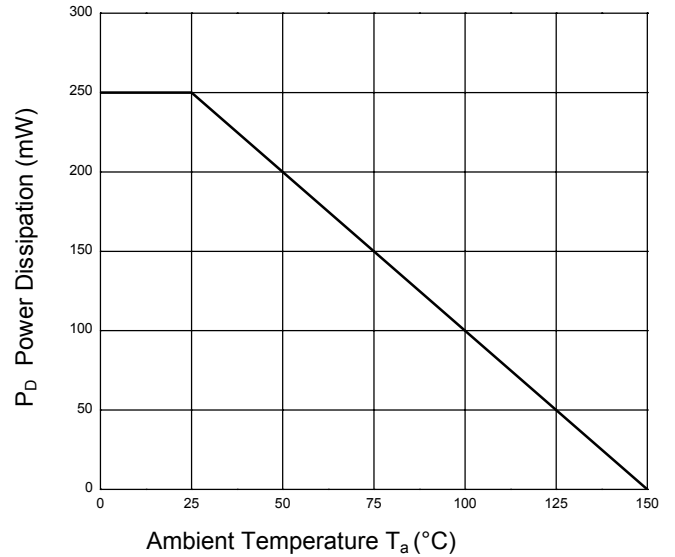
**Figure 1. Forward Characteristics**



**Figure 2. Reverse Characteristics**

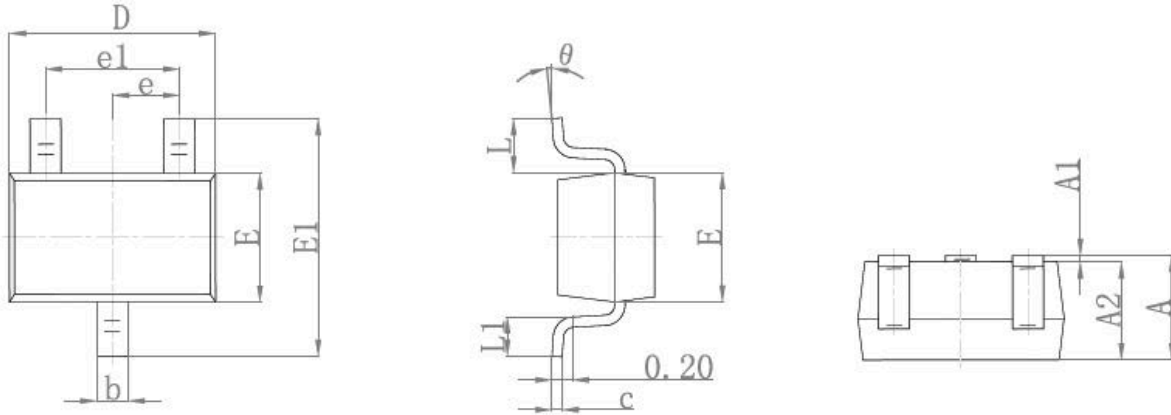


**Figure 3. Capacitance Characteristics Per Diode**



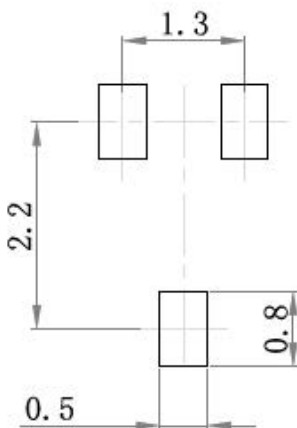
**Figure 4. Power Derating Curve**

**Package Outline Dimensions SOT-323**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

**Recommended 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.