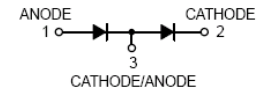




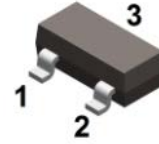
### Features

- Low forward voltage
- Small total capacitance
- Fast reverse recovery time



### Mechanical Data

- Case: SOT-23
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208



SOT-23

### Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
1SS226	SOT-23	3000 pcs / Tape & Reel	C3

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

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	85	V
DC Blocking Voltage	V <sub>R</sub>	80	V
Forward Current	I <sub>F</sub>	100	mA
Maximum(peak) Forward Current	I <sub>FM</sub>	300	mA
Peak Forward Surge Current, t <sub>p</sub> = 10ms	I <sub>FSM</sub>	2	A

### Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P <sub>D</sub>	350	mW
Thermal Resistance Junction-to-Air *1	R <sub>θJA</sub>	152	°C/W
Thermal Resistance Junction-to-Case *1	R <sub>θJC</sub>	92	°C/W
Thermal Resistance Junction-to-Lead *1	R <sub>θJL</sub>	80	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 ~ +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	°C

Note 1: The data tested by surface mounted on a 15mm \* 15mm \* 1mm FR4-epoxy P.C.B



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

Parameter	Symbol	Test Condition	Min.		Max.	Unit
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> = 100μA	80	-	-	V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 1mA	-	0.60	-	V
		I <sub>F</sub> = 10mA	-	0.72	-	V
		I <sub>F</sub> = 100mA	-	0.90	1.20	V
Maximum Peak Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 30V	-	-	0.1	μA
		V <sub>R</sub> = 80V	-	-	0.5	μA
Total Capacitance	C <sub>J</sub>	V <sub>R</sub> = 0V, f = 1.0MHz	-	0.7	3	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 10mA I <sub>rr</sub> = 0.1×I <sub>R</sub> , R <sub>L</sub> = 100Ω	-	-	4	ns

## Ratings and Characteristics Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

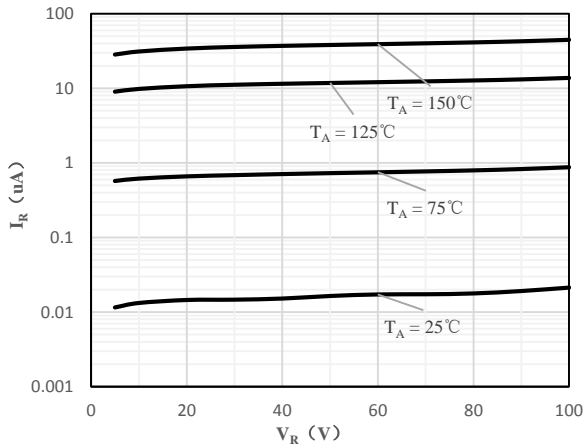


Fig 1 Typical Reverse Characteristic

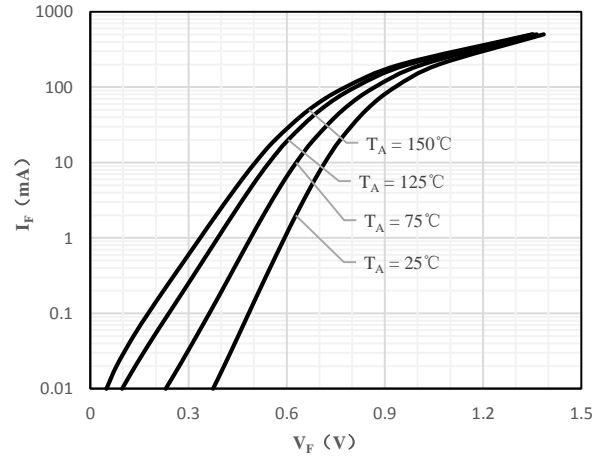


Fig 2 Typical Forward Characteristics

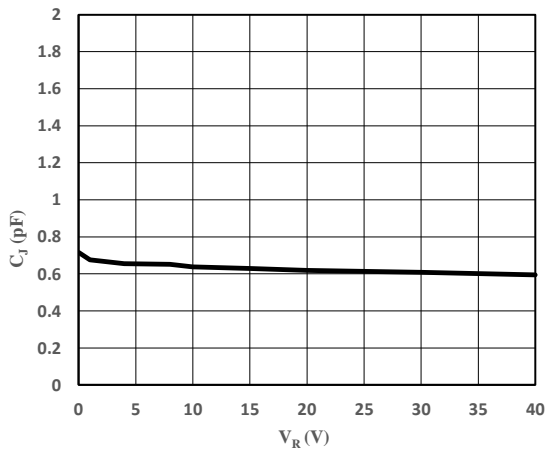


Fig 3 Capacitance vs. Reverse Voltage

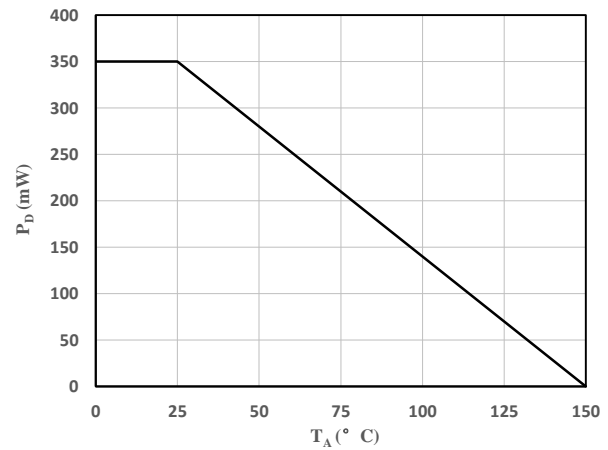


Fig 4 Power Derating Curve

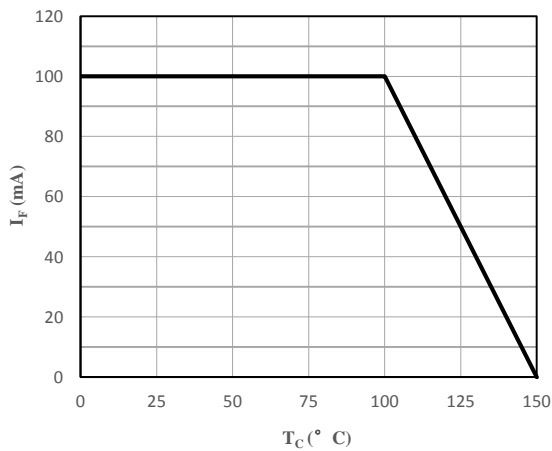
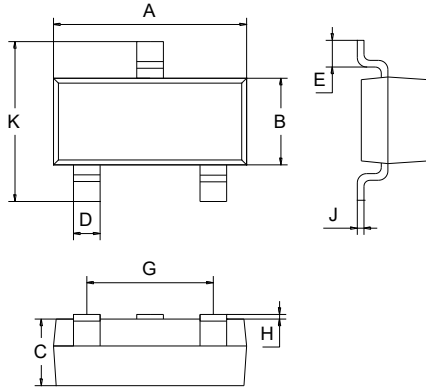


Fig 5 Current Derating

## Package Outline Dimensions (Unit: mm)



SOT-23		
Dimension	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

## Package Outline Dimensions (Unit: mm)

### SOT-23

