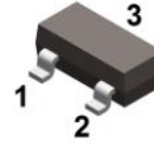
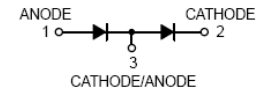


Features

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



SOT-23

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

Ordering Information

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

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	85	V
DC Blocking Voltage	V _R	80	V
Forward Current	I _F	100	mA
Maximum(peak) Forward Current	I _{FM}	300	mA
Peak Forward Surge Current, t _p = 10ms	I _{FSM}	2	A

Thermal Characteristics

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

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

Electrical Characteristics (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min.		Max.	Unit
Reverse Breakdown Voltage	V _{(BR)R}	I _R = 100μA	80	-	-	V
Forward Voltage	V _F	I _F = 1mA	-	0.60	-	V
		I _F = 10mA	-	0.72	-	V
		I _F = 100mA	-	0.90	1.20	V
Maximum Peak Reverse Current	I _R	V _R = 30V	-	-	0.1	μA
		V _R = 80V	-	-	0.5	μA
Total Capacitance	C _J	V _R = 0V, f = 1.0MHz	-	0.7	3	pF
Reverse Recovery Time	t _{rr}	I _F = I _R = 10mA I _{rr} = 0.1×I _R , R _L = 100Ω	-	-	4	ns



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

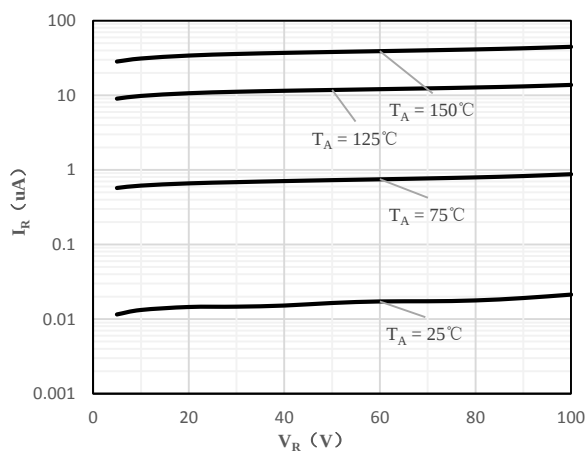


Fig 1 Typical Reverse Characteristic

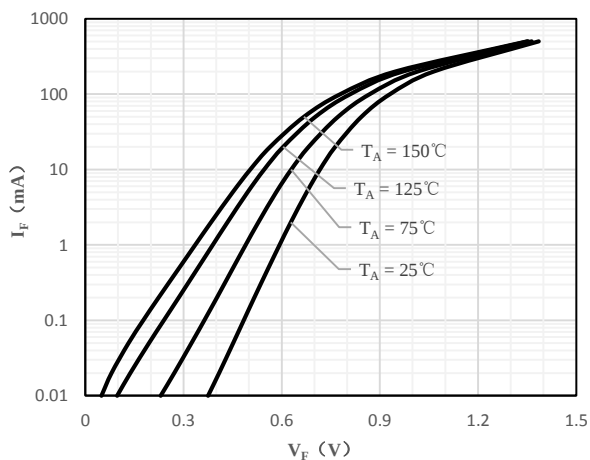


Fig 2 Typical Forward Characteristics

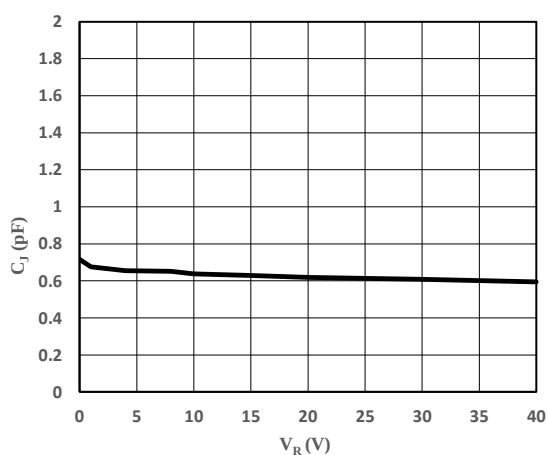


Fig 3 Capacitance vs. Reverse Voltage

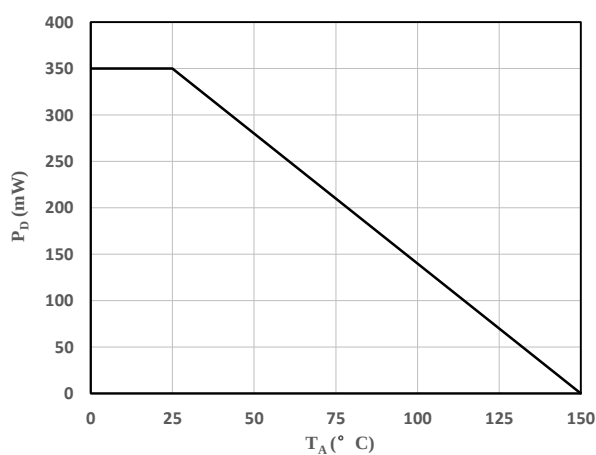


Fig 4 Power Derating Curve

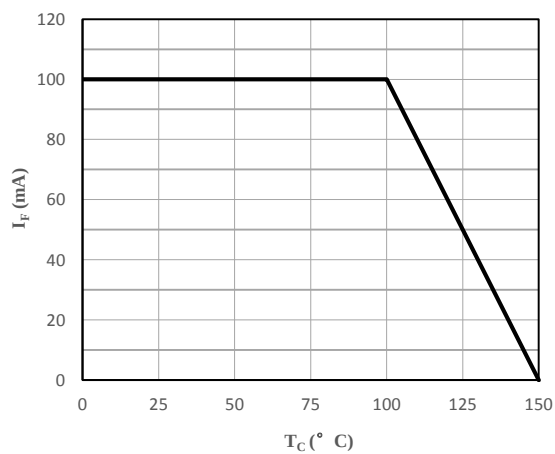
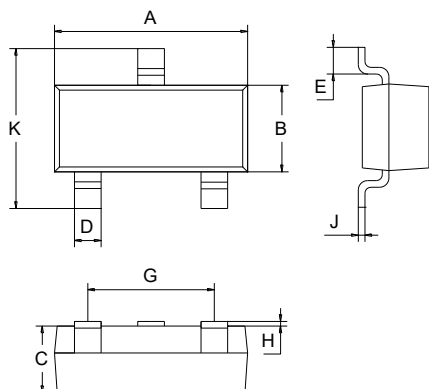


Fig 5 Current Derating



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

