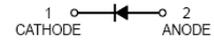


### Features

- High speed and high reliability

HF



### Mechanical Data

- Case: SOD-523
- 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
1SS422	SOD-523	3000 pcs / Tape & Reel	6

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

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
DC Blocking Voltage	V <sub>R</sub>	85	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	V
Average Rectified Output Current	I <sub>o</sub>	150	mA
Peak Forward Surge Current, 1s Single Half-sine-wave	I <sub>FSM</sub>	0.5	A

### Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P <sub>D</sub>	150	mW
Operating Junction Temperature Range	T <sub>J</sub>	-55 ~ +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	°C

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 150\text{mA}$	-	-	1.2	V
Maximum Peak Reverse Current	$I_R$	$V_R = 85\text{V}$	-	-	0.1	$\mu\text{A}$
Total Capacitance	$C_J$	$V_R = 0.5\text{V}, f = 1.0\text{MHz}$	-	-	3	pF
Reverse Recovery Time	$t_{rr}$	$I_F = 10\text{mA}, V_R = 6\text{V}$ $R_L = 100\Omega$	-	-	4	ns

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

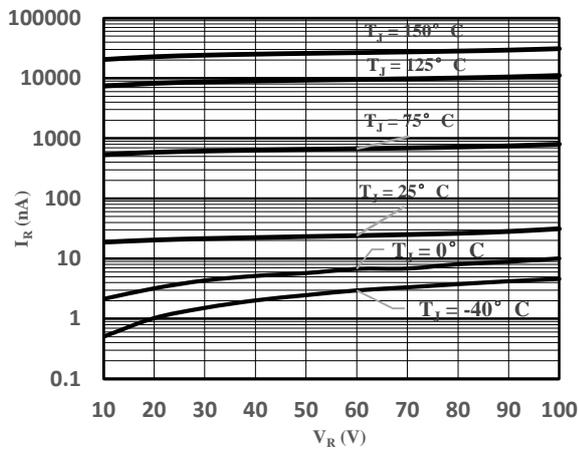


Fig 1 Typical Reverse Characteristic

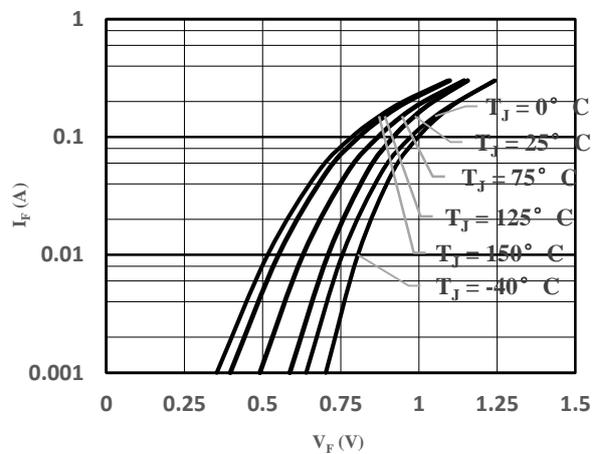


Fig 2 Typical Forward Characteristics

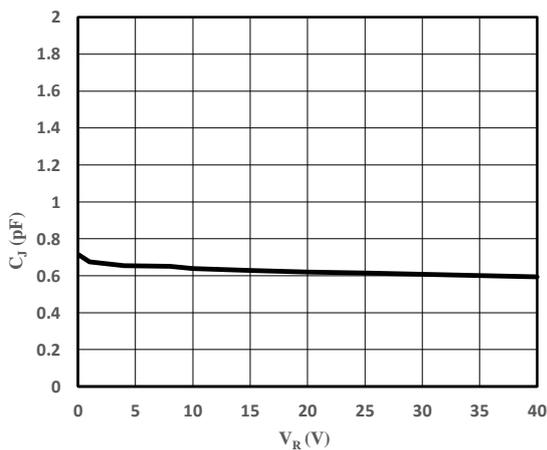


Fig 3 Capacitance vs. Reverse Voltage

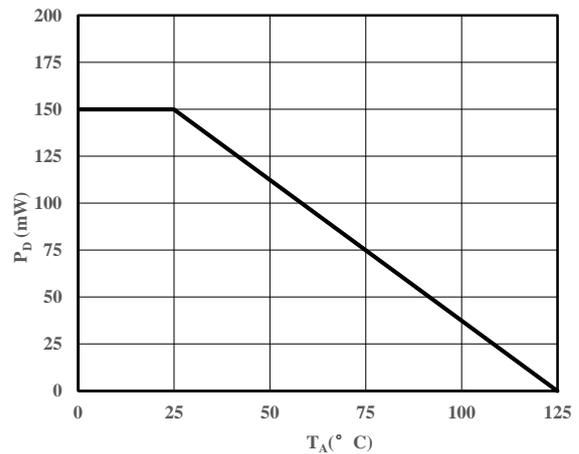
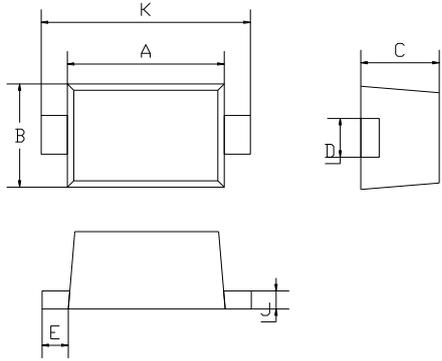


Fig 4 Power Derating Curve

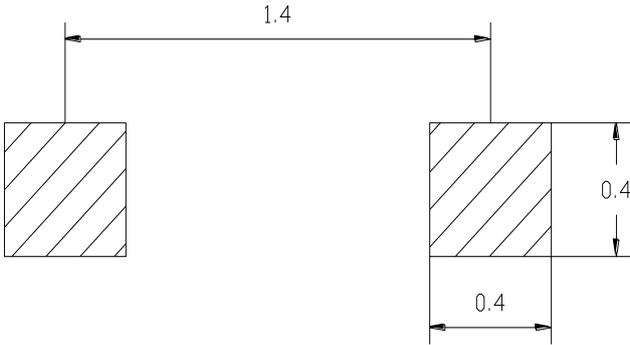
**Package Outline Dimensions** (Unit: mm)



SOD-523		
Dimension	Min.	Max.
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
E	0.15	0.25
J	0.05	0.15
K	1.50	1.70

**Package Outline Dimensions** (Unit: mm)

**SOD-523**



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