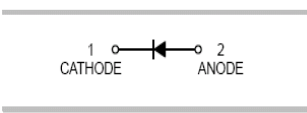


### Features

- High reliability with high surge current handing capability
- Small surface mounting type

**HF**



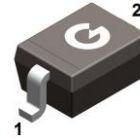
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### Typical Applications

- High speed switching

### Mechanical Data

- Case: SOD-323
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208



**SOD-323**

### Ordering Information

Part Number	Package	Shipping	Marking Code
1SS404	SOD-323	3000 pcs / Tape & Reel	S51

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	25	V
RMS Reverse Voltage	V <sub>RMS</sub>	20	V
Maximum Average Forward Output Current	I <sub>F(AV)</sub>	0.3	A
Peak Forward Surge Current, 8.3ms Single Half-sine-wave	I <sub>FSM</sub>	1	A

### Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P <sub>D</sub>	250	mW
Typical Thermal Resistance per leg	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	°C

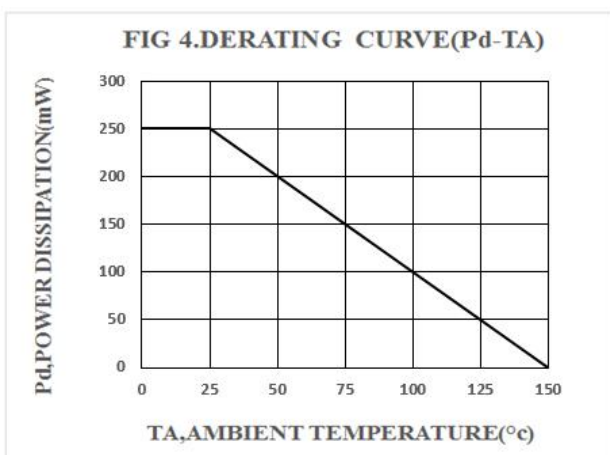
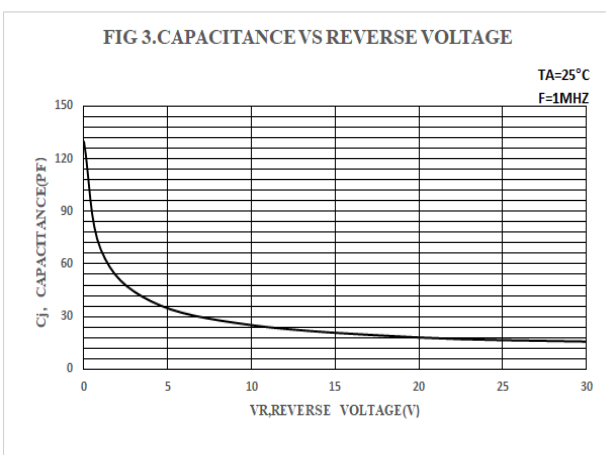
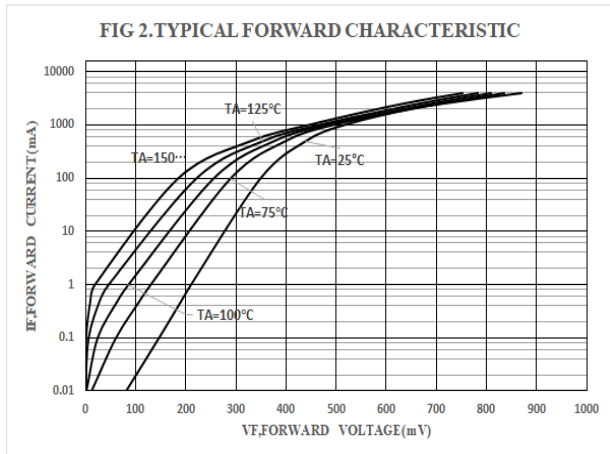
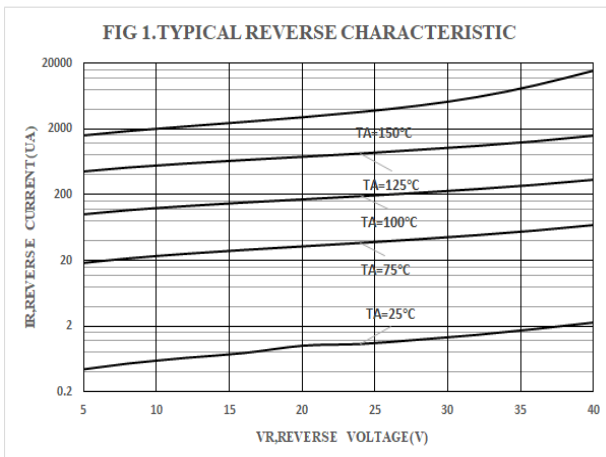
### Electrical Characteristics (@ $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F^*$	$I_F=1\text{mA}$	-	0.22	-	V
		$I_F=10\text{mA}$	-	0.28	-	
		$I_F=300\text{mA}$	-	0.41	0.45	
Maximum Peak Reverse Current	$I_R^{**}$	$V_R=20\text{V}$	-	-	50	$\mu\text{A}$
Capacitance Between Terminals	$C_T$	$V_R=4\text{V}, f=1\text{MHz}$	-	38	-	pF

\*Pulse width  $\leq 380\ \mu\text{s}$ , Duty cycle  $< 2\%$

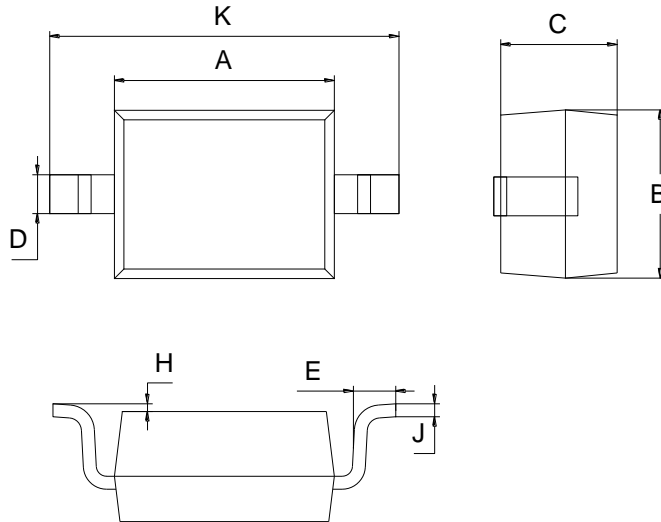
\*\*pulse test ,  $t_p \leq 5\text{ms}$

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



Package Outline Dimensions (unit: mm)

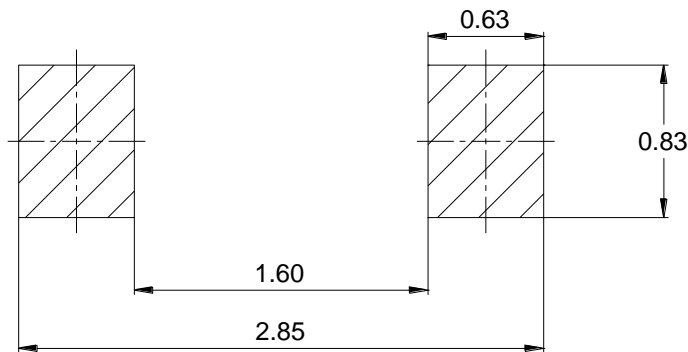
SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout (unit: mm)

SOD-323



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