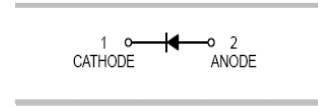




Features

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

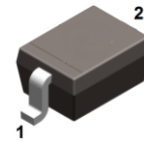


Typical Applications

- 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_A=25°C unless otherwise specified)

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

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P _D	250	mW
Typical Thermal Resistance per leg	R _{θJA} *	500	°C/W
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

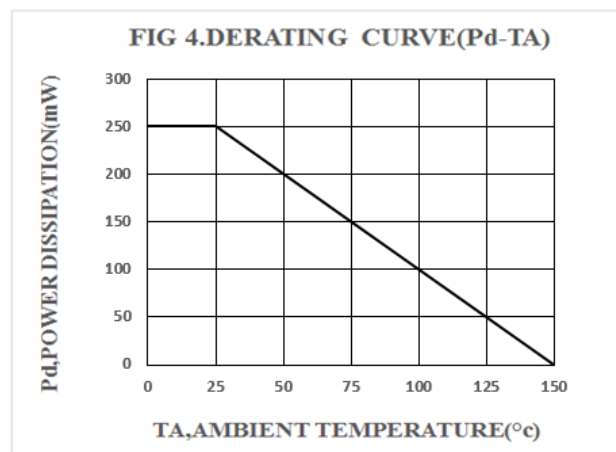
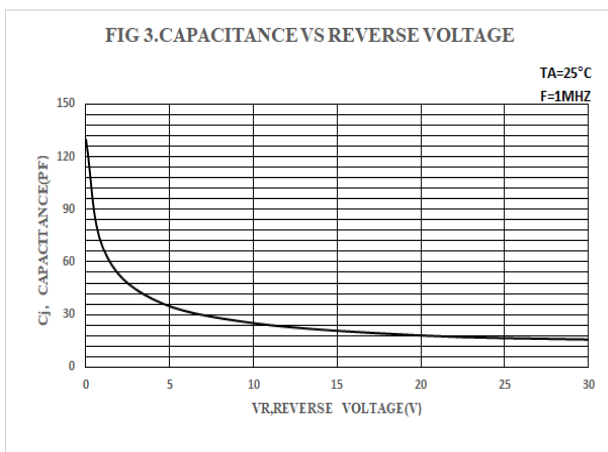
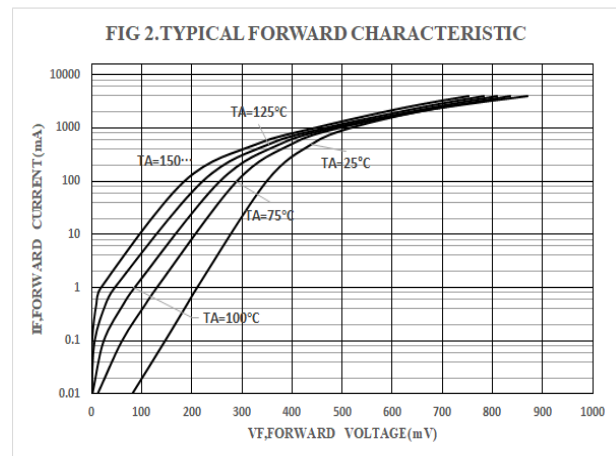
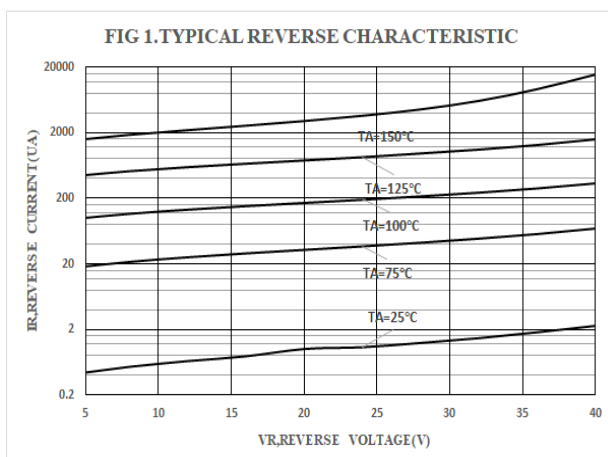


Electrical Characteristics (@ $T_A=25^\circ\text{C}$ unless otherwise specified)

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	μA
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 , $t_p \leq 5\text{ms}$

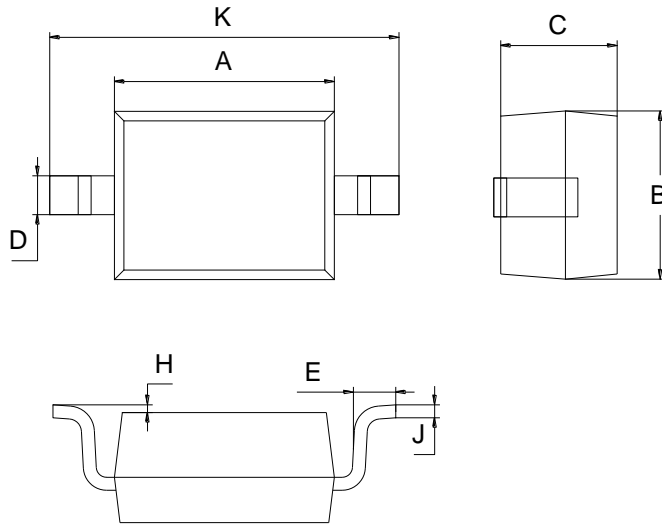
Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)





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

