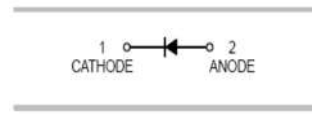


Features

- Low reverse current and low forward voltage.
- High reliability.
- Small surface mounting type.



SOD-323

Typical Applications

- For general purpose applications

Mechanical Data

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

Ordering Information

Part Number	Package	Shipping	Marking Code
SD103AWS□	SOD-323	3000/Tape Reel	S4
SD103BWS□	SOD-323	3000/Tape Reel	S5
SD103CWS□	SOD-323	3000/Tape Reel	S6

□: none is for Lead Free package;

“G” is for Halogen Free package.

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

Characteristic	Symbol	SD103AWS	SD103BWS	SD103CWS	Units
Peak repetitive reverse voltage	V _{RRM}	40	30	20	V
RMS Reverse voltage	V _{RMS}	28	21	14	V
Maximum average forward output current	I _{F(AV)}	350			mA
Peak forward surge current, 8.3ms single half-sine-wave	I _{FSM}	1.5			A

Thermal Characteristics

Characteristic	Symbol	Value	Units
Power dissipation	P _D	200	mW
Typical thermal resistance per leg	R _{θJA} *	500	°C/W
Operating junction temperature range	T _J	125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

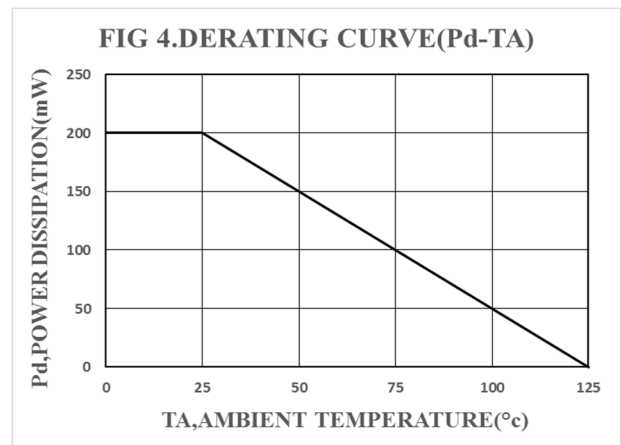
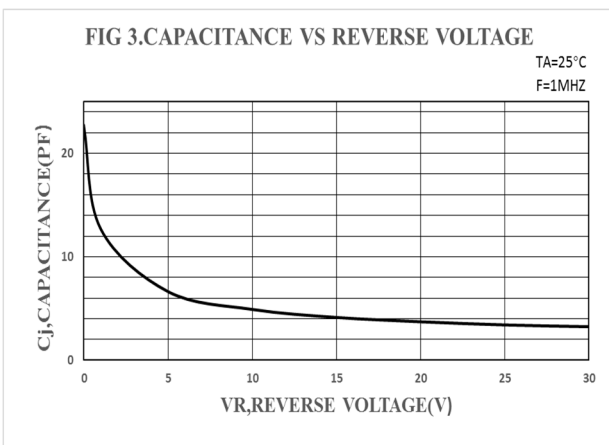
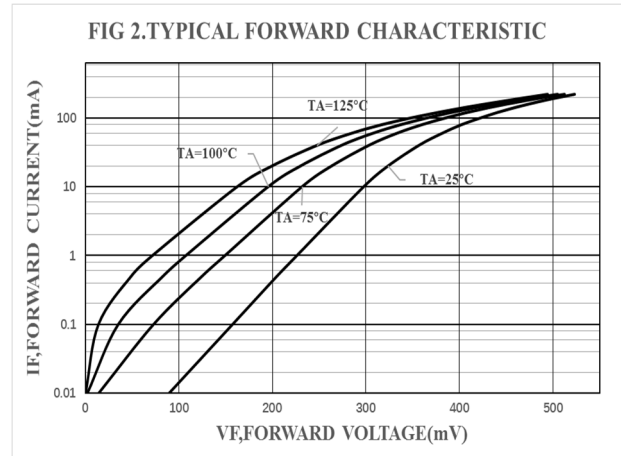
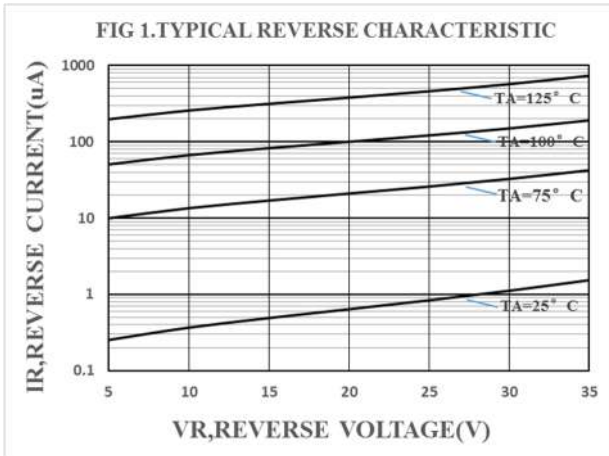
* Part mounted on FR-4 board with recommended pad layout

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

Characteristic	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V_F^*	$I_F=20\text{mA}$	-	-	0.37	V
		$I_F=200\text{mA}$	-	-	0.60	
Maximum Peak Reverse Current	I_R^{**}	$V_R=30\text{V}$ (SD103AWS) $V_R=20\text{V}$ (SD103BWS) $V_R=10\text{V}$ (SD103CWS)	-	-	5	μA
Capacitance between terminals	C_T	$V_R=0\text{V}, f=1\text{MHz}$	-	22	50	pF

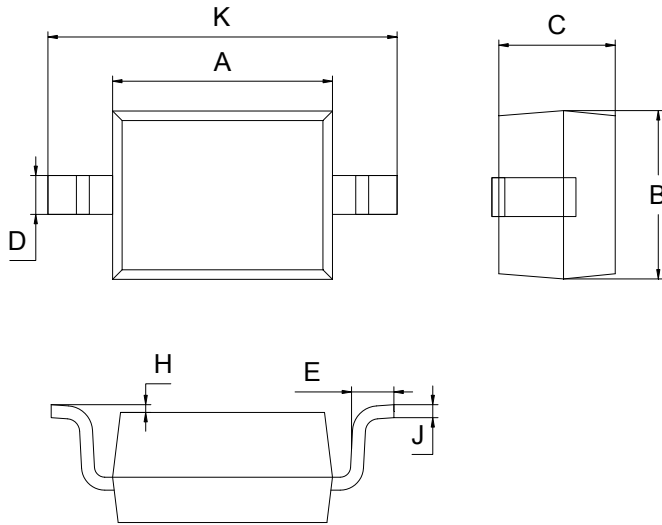
*Pulse width $\leq 380\ \mu\text{s}$, Duty cycle $< 2\%$
**pulse test, $t_p \leq 5\text{ms}$

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



Package Outline Dimensions (unit:mm)

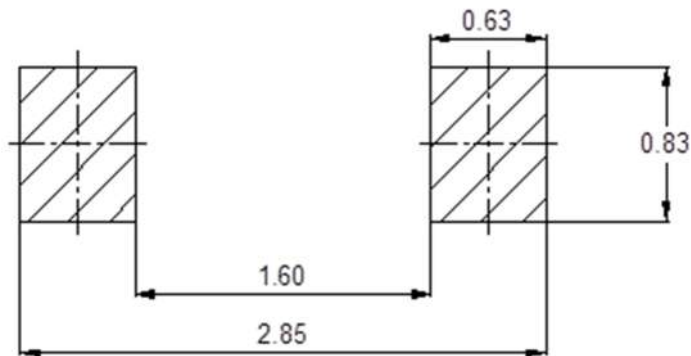
SOD-323



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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