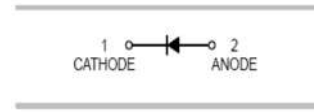


### Features

- Low Forward Voltage Drop.
- Guard Ring Construction For Transient Protection.
- Negligible Reverse Recovery Time.



SOD-323

### Typical Applications

- For high speed switching 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
SD101AWS□	SOD-323	3000/Tape Reel	S1
SD101BWS□	SOD-323	3000/Tape Reel	S2
SD101CWS□	SOD-323	3000/Tape Reel	S3

□: none is for Lead Free package;  
“G” is for Halogen Free package.

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

Characteristic	Symbol	SD101AWS	SD101BWS	SD101CWS	Units
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	60	50	40	V
RMS Reverse Voltage	V <sub>RMS</sub>	42	35	28	V
Forward Continuous Current	I <sub>FM</sub>	15			mA
Repetitive Peak Forward Current @t<1.0s @t=10μs	I <sub>FRM</sub>	50			mA
		2			A

### Thermal Characteristics

Characteristic	Symbol	Value	Units
Power dissipation	P <sub>D</sub>	200	mW
Typical thermal resistance per leg	R <sub>θJA</sub> *	500	°C/W
Operating junction temperature range	T <sub>J</sub>	125	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

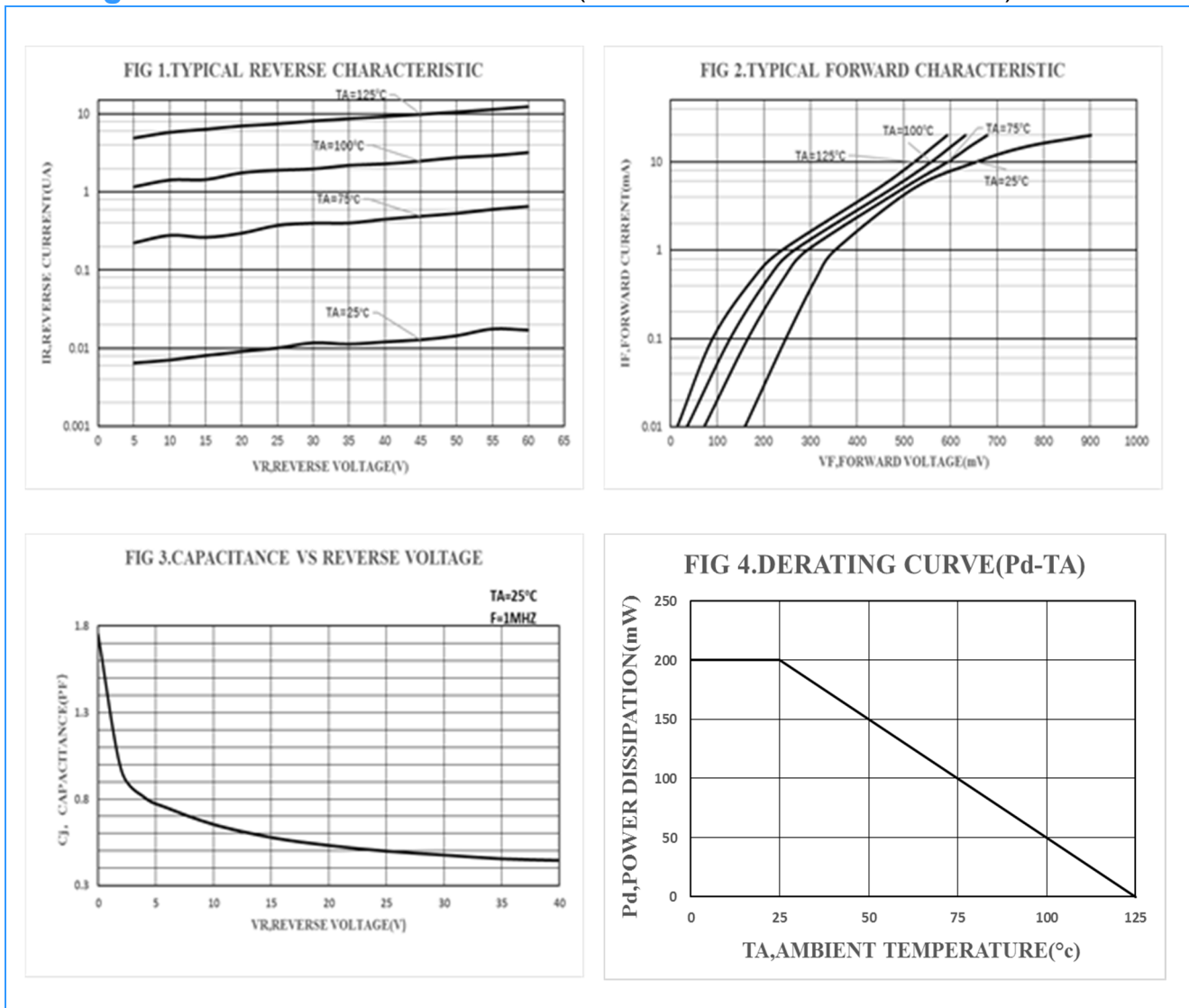
\* Part mounted on FR-4 board with recommended pad layout

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

Characteristic	Symbol	Test conditions	Min.	Typ.	Max.	Units	
Forward Voltage	$V_F^*$	$I_F=1\text{mA}$	SD101AWS			0.41	V
			SD101BWS	-	-	0.40	
			SD101CWS			0.39	
		$I_F=15\text{mA}$	SD101AWS			1.00	
			SD101BWS	-	-	0.95	
			SD101CWS			0.90	
Maximum Peak Reverse Current	$I_{R}^{**}$	$V_R=50\text{V}$ (SD101AWS) $V_R=40\text{V}$ (SD101BWS) $V_R=30\text{V}$ (SD101CWS)	-	-	0.2	$\mu\text{A}$	
Capacitance Between Terminals	$C_T$	$V_R=0\text{V}, f=1\text{MHz}$	-	-	2	pF	

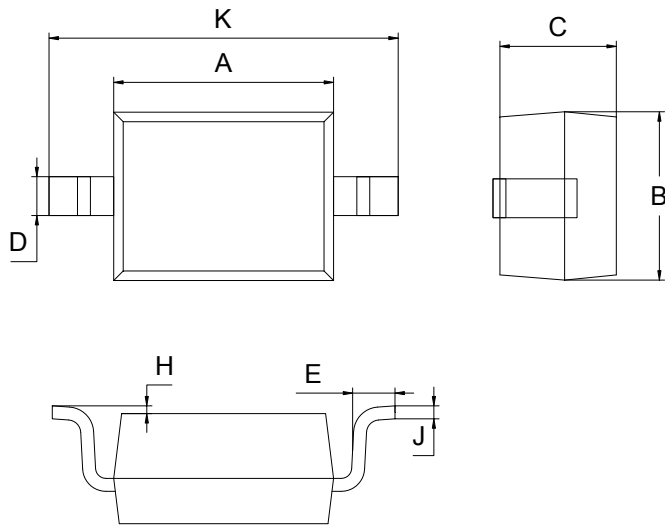
\* pulse test ,  $t_p \leq 300\mu\text{s}$   
\*\* pulse test ,  $t_p \leq 5\text{ms}$

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



### Package Outline Dimensions (unit:mm)

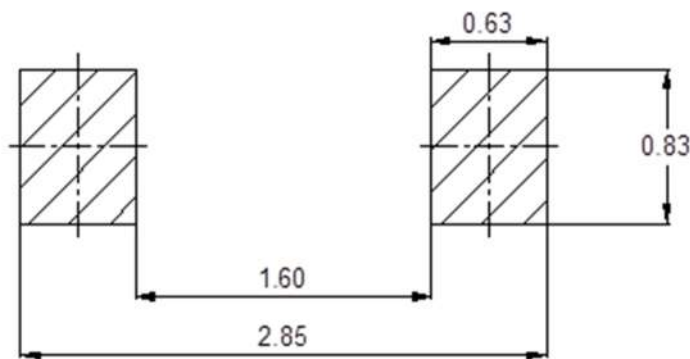
#### SOD-323



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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