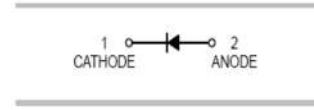




### Features

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



### Typical Applications

- For high speed switching applications.

### Mechanical Data

- Case: SOD-123
- Molding compound, UL flammability classification rating 94V-0.
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208.



SOD-123

### Ordering Information

Part Number	Package	Shipping	Marking Code
SD101AW□	SOD-123	3000/Tape Reel	S1
SD101BW□	SOD-123	3000/Tape Reel	S2
SD101CW□	SOD-123	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	SD101AW	SD101BW	SD101CW	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>	400	mW
Typical thermal resistance per leg	R <sub>θJA</sub> *	300	°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



# SD101AW SD101BW SD101CW

Small Signal Schottky Barrier Diode



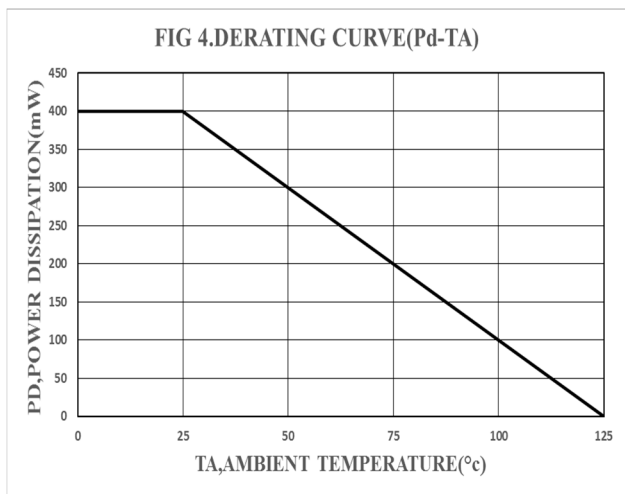
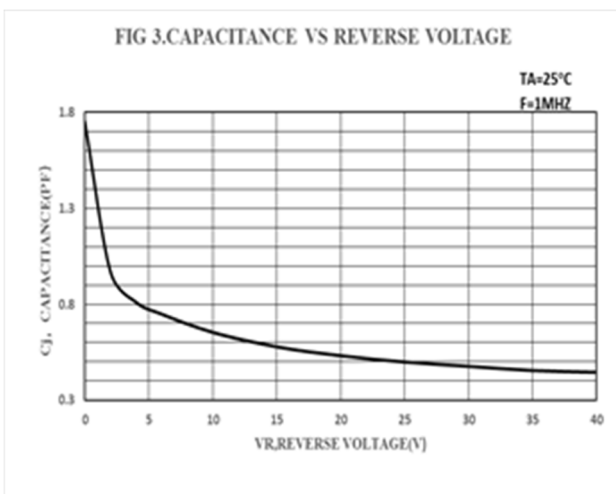
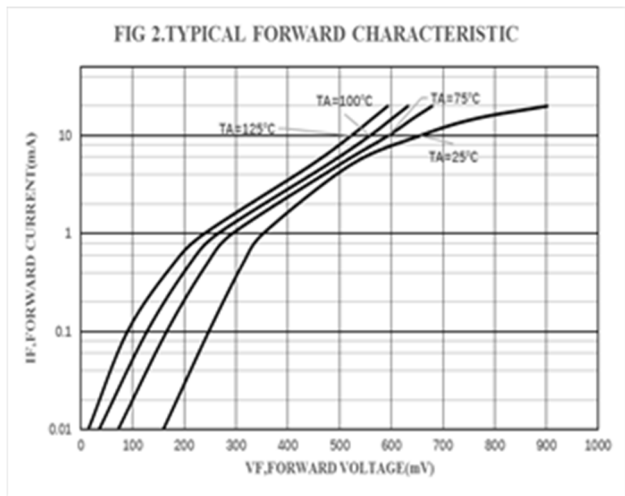
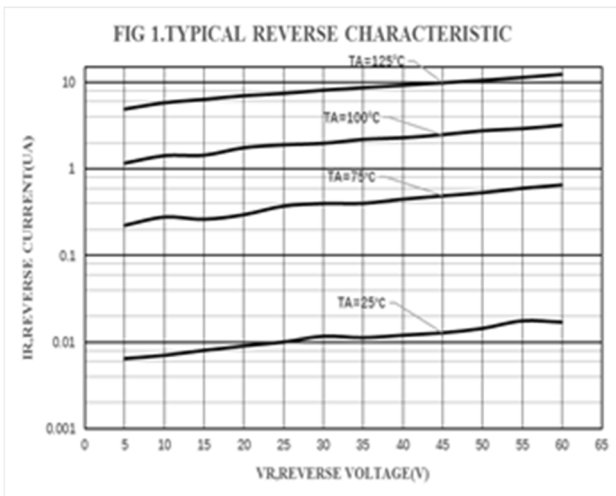
## Electrical Characteristics (@ $T_A=25^\circ\text{C}$ unless otherwise specified)

Characteristic	Symbol	Test conditions	Min.	Typ.	Max.	Units	
Forward Voltage	$V_F^*$	$I_F=1\text{mA}$	SD101AW		0.41	V	
			SD101BW	-	-		0.40
			SD101CW				0.39
		$I_F=15\text{mA}$	SD101AW				1.00
			SD101BW	-	-		0.95
			SD101CW				0.90
Maximum Peak Reverse Current	$I_{R}^{**}$	$V_R=50\text{V}$ (SD101AW) $V_R=40\text{V}$ (SD101BW) $V_R=30\text{V}$ (SD101CW)	-	-	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 ,  $t_p \leq 5\text{ms}$

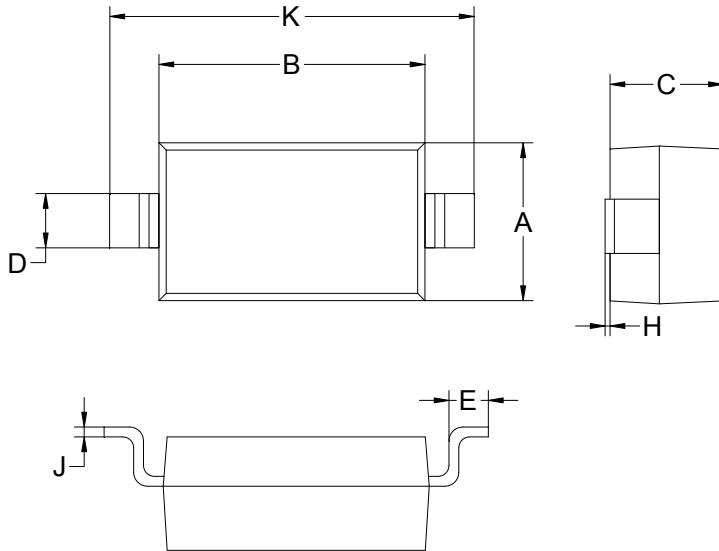
## Ratings and Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)





### Package Outline Dimensions(unit:mm)

#### SOD-123



SOD-123		
Dim	Min	Max
A	1.45	1.75
B	2.55	2.85
C	1.00	1.30
D	0.50	0.60
E	0.25	0.45
H	0.02	0.10
J	0.05	0.15
K	3.55	3.85

### Mounting Pad Layout(unit:mm)

#### SOD-123

