

# SD101AW/BW/CW

## SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 40 to 60 Volt **CURRENT** 0.015 Ampere

**SOD-123**

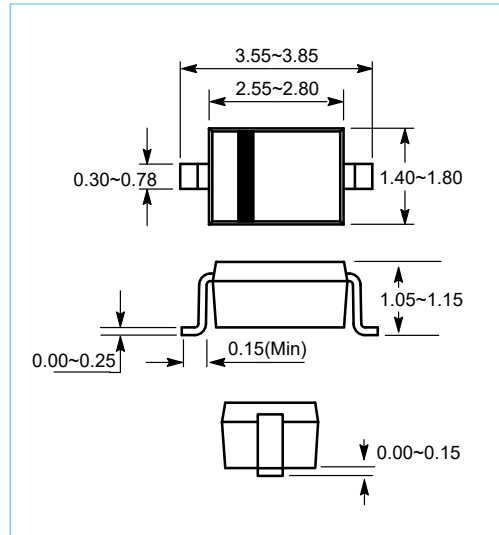
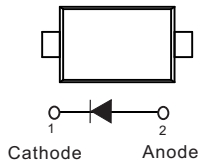
Unit:mm

### FEATURES

- Low Forward Voltage Drop
- Low Reverse Capacitance
- Lead free in compliance with EU RoHS
- Marking code: SD101AW: S1 ,SD101BW: S2 , SD101CW: S3

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS(T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	SD101AW	SD101BW	SD101CW	Unit
Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	60	50	40	V
Working Peak Reverse Voltage	V <sub>RWM</sub>				
DC Blocking Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>R(RMS)</sub>	42	35	28	V
Forward Continuous Current	I <sub>FM</sub>	15			mA
Peak Repetitive Peak Forward Surge Current @1, " a s	I <sub>FSM</sub>	2.0			A
Power Dissipation	P <sub>d</sub>	400			mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	250			°C/W
Junction Temperature	T <sub>j</sub>	125			°C
Storage Temperature	T <sub>STG</sub>	-55~+150			°C

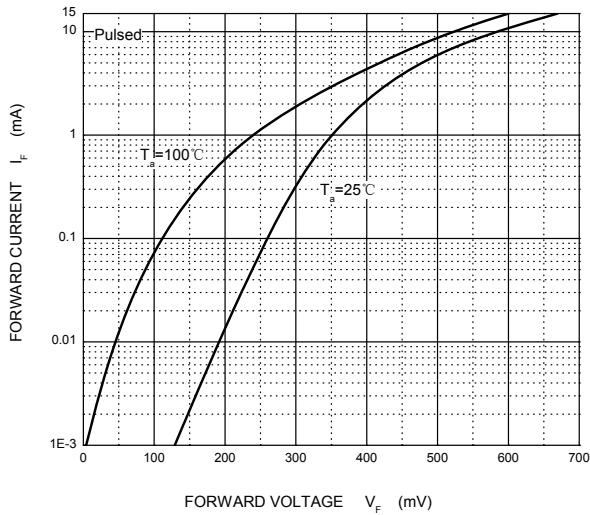
### ELECTRICAL CHARACTERISTICS(T<sub>A</sub> = 25°C unless otherwise noted)

Characteristic	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Leakage	I <sub>R</sub>	(V <sub>R</sub> = 50 V) (V <sub>R</sub> = 40 V) (V <sub>R</sub> = 30 V)			0.2	μA
Forward Voltage	V <sub>F</sub>	(I <sub>F</sub> = 1 mA)			0.41	V
		(I <sub>F</sub> = 15 mA)			0.40	V
					0.39	V
					1.00	V
					0.95	V
					0.90	V
Total Capacitance	C <sub>T</sub>	(V <sub>R</sub> = 0 V, f = 1.0 MHz)			2.0	pF
					2.1	pF
					2.2	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =5mA, I <sub>rr</sub> =0.1xI <sub>R</sub> , R <sub>L</sub> =100 Ω			1.0	ns

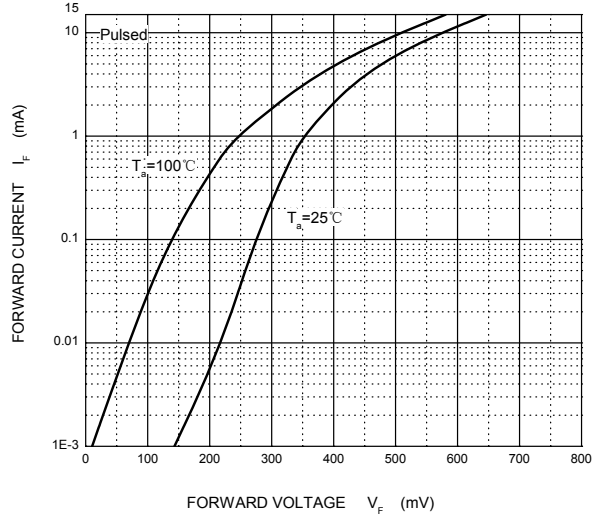
# SD101AW/BW/CW

## Typical Characteristics

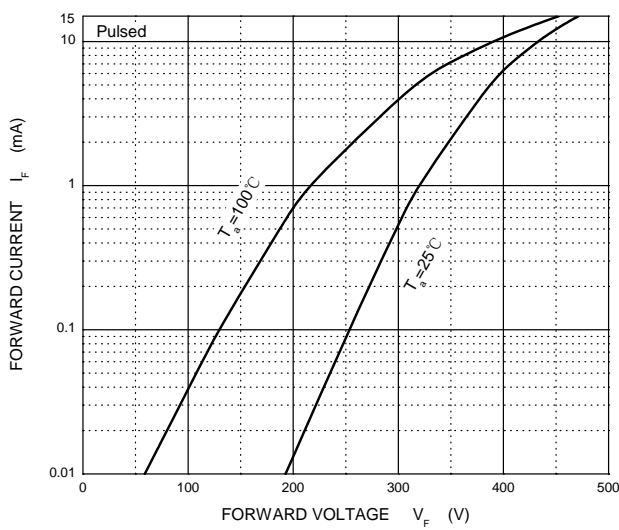
Forward Characteristics--SD101AWS



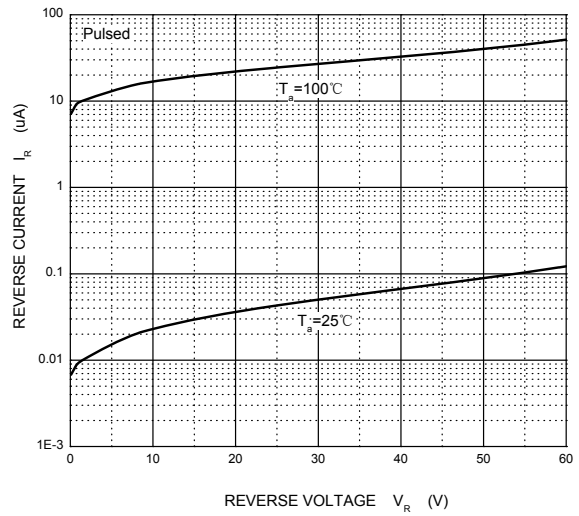
Forward Characteristics--SD101BWS



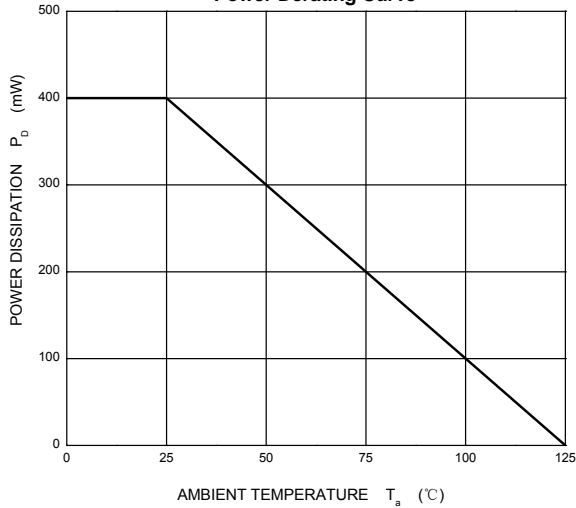
Forward Characteristics--SD101CWS



Reverse Characteristics



Power Derating Curve

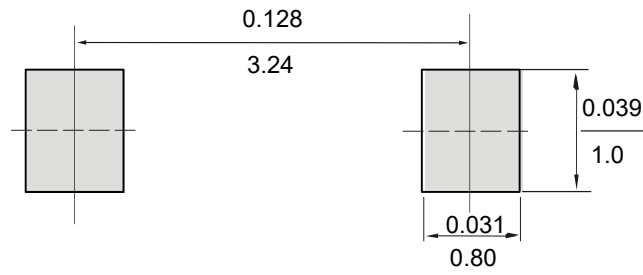


# SD101AW/BW/CW

## MOUNTING PAD LAYOUT

### SOD-123

Unit:Inch(mm)



## ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
SD101AW/BW/CW	SOD-123	7 Inch	3000