

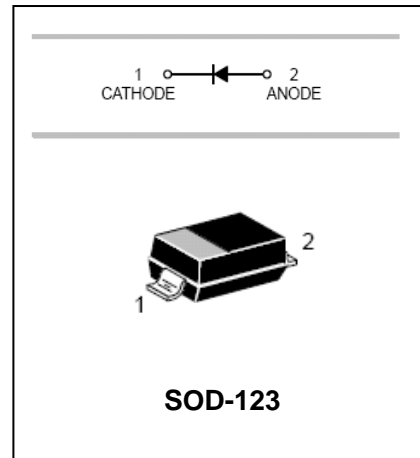


## Schottky Barrier Diode

## SD101AW/SD101BW/SD101CW

### FEATURES

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



### APPLICATIONS

- Schottky barrier switching.

### ORDERING INFORMATION

Type No.	Marking	Package Code
SD101AW	S1	SOD-123
SD101BW	S2	SOD-123
SD101CW	S3	SOD-123

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	SD101AW	SD101BW	SD101CW	Unit
Peak Repetitive Peak reverse voltage	$V_{RR}$				
Working Peak	$V_{RWM}$	60	50	40	V
DC Reverse Voltage	$V_R$				
RMS Reverse Voltage	$V_{R(RMS)}$	42	35	28	V
Forward Continuous Current	$I_{FM}$	15			mA
Repetitive Peak Forward Current @t<1.0s @t=10µs	$I_{FRM}$	50			mA
		2.0			A
Power Dissipation	$P_d$	400			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	300			°C/W
Storage temperature	$T_{stg}$	-65 to +125			°C



**Schottky Barrier Diode**

**SD101AW/SD101BW/SD101CW**

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	SD101AW SD101BW SD101CW	60 50 40			V	$I_R=10\mu A$ $I_R=10\mu A$ $I_R=10\mu A$
Forward voltage	SD101AW SD101BW SD101CW SD101AW SD101BW SD101CW			0.41 0.40 0.39 1.00 0.95 0.90	V	$I_F=1.0mA$ $I_F=1.0mA$ $I_F=1.0mA$ $I_F=15mA$ $I_F=15mA$ $I_F=15mA$
Reverse current	SD101AW SD101BW SD101CW			0.2	$\mu A$	$V_R=50V$ $V_R=40V$ $V_R=30V$
Capacitance between terminals	SD101AW SD101BW SD101CW			2.0 2.1 2.2	pF	$V_R=0, f=1MHz$
Reverse Recovery Time				1.0	ns	$I_R=I_F=5mA$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

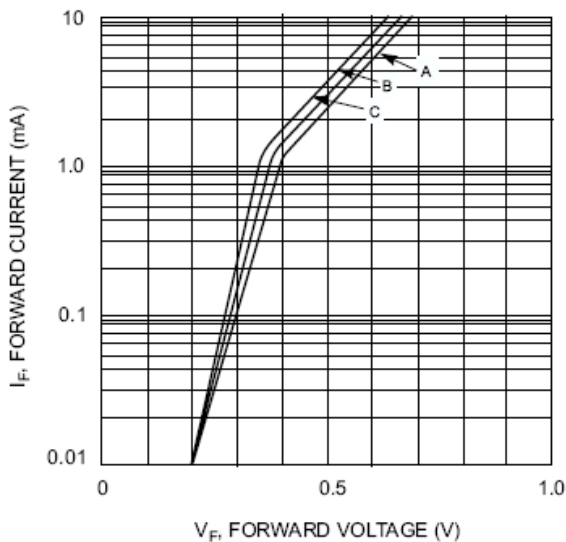


Fig. 1 Typical Forward Characteristic Variations for Primary Conduction

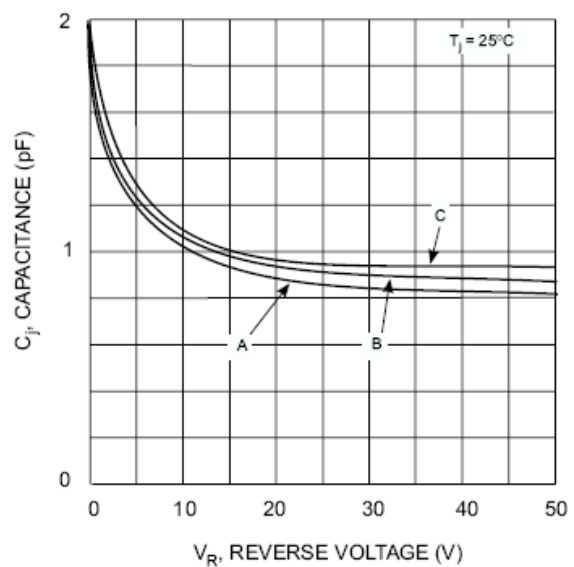


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage



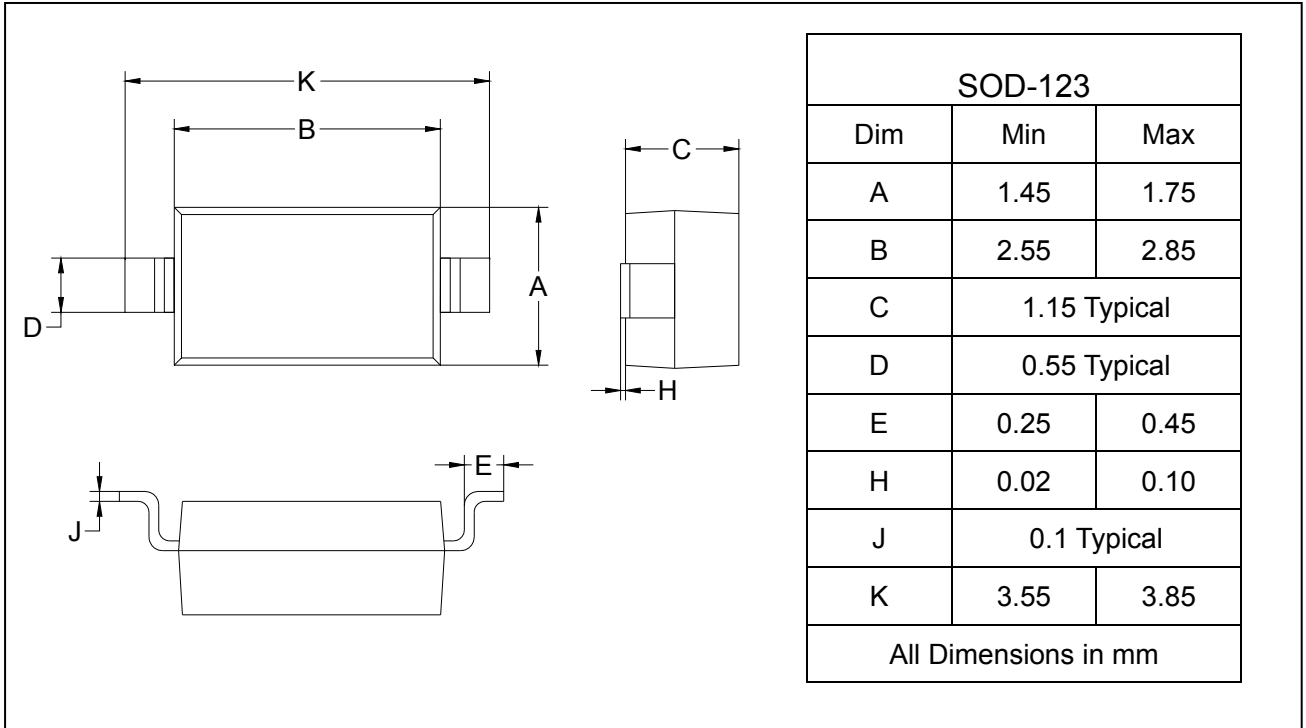
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**SD101AW/SD101BW/SD101CW**

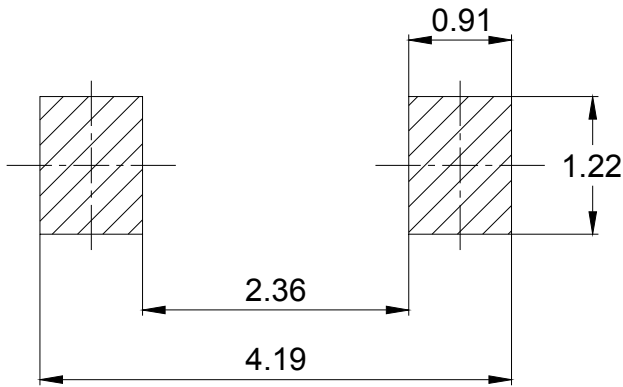
**PACKAGE OUTLINE**

Plastic surface mounted package

SOD-123



**SOLDERING FOOTPRINT**



Unit: mm

**PACKAGE INFORMATION**

Device	Package	Shipping
SD101AW-SD101CW	SOD-123	3000/Tape&Reel