

Schottky Barrier Diode

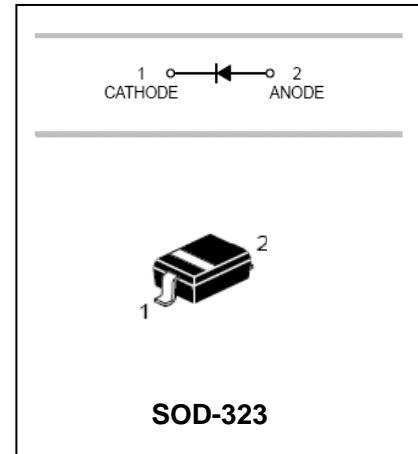
**SD101AWS/SD101BWS/SD101CWS**

### FEATURES

- Low Forward Voltage Drop.
- Guard Ring Construction For Transient Protection.
- Negligible Reverse Recovery Time.
- Low reverse capacitance.
- Ultra-small surface mount package.



Lead-free



### APPLICATIONS

- Schottky barrier switching.

### ORDERING INFORMATION

Type No.	Marking	Package Code
SD101AWS	S1	SOD-323
SD101BWS	S2	SOD-323
SD101CWS	S3	SOD-323

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

Parameter	Symbol	SD101AW	SD101BW	SD101CW	Unit
Peak Repetitive Peak reverse voltage	V <sub>RRM</sub>				
Working Peak DC Reverse Voltage	V <sub>RWM</sub>	60	50	40	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	42	35	28	V
Forward Continuous Current	I <sub>F</sub>	15			mA
Repetitive Peak Forward Current @t<1.0s @t=10μs	I <sub>FRM</sub>	50			mA
		2.0			A
Power Dissipation	P <sub>d</sub>	200			mW
Thermal Resistance Junction to Ambient	R <sub>θjA</sub>	625			°C/W
Storage temperature	T <sub>stg</sub>	-65~+125			°C

# Diode Semiconductor Korea

Schottky Barrier Diode

**SD101AWS/SD101BWS/SD101CWS**

ELECTRICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

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

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

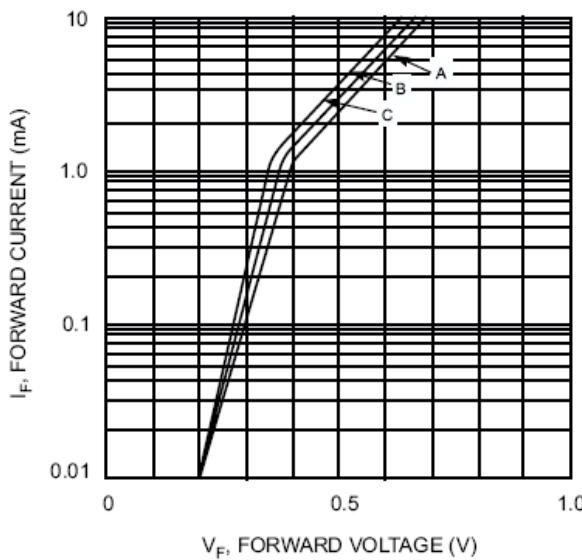


Fig. 1 Typical Forward Characteristic Variations for Primary Conduction

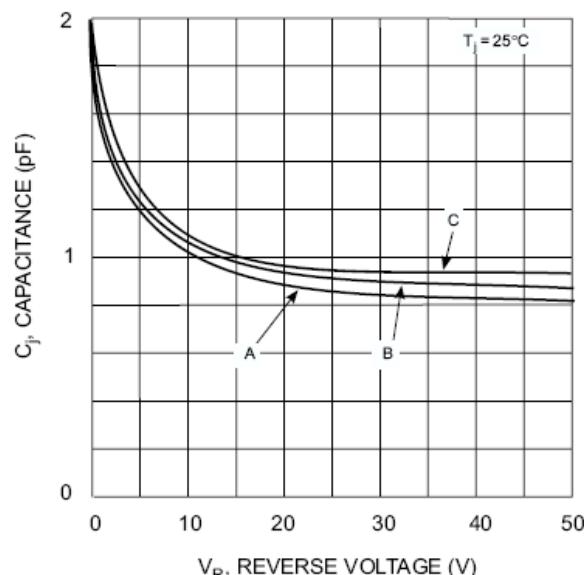


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

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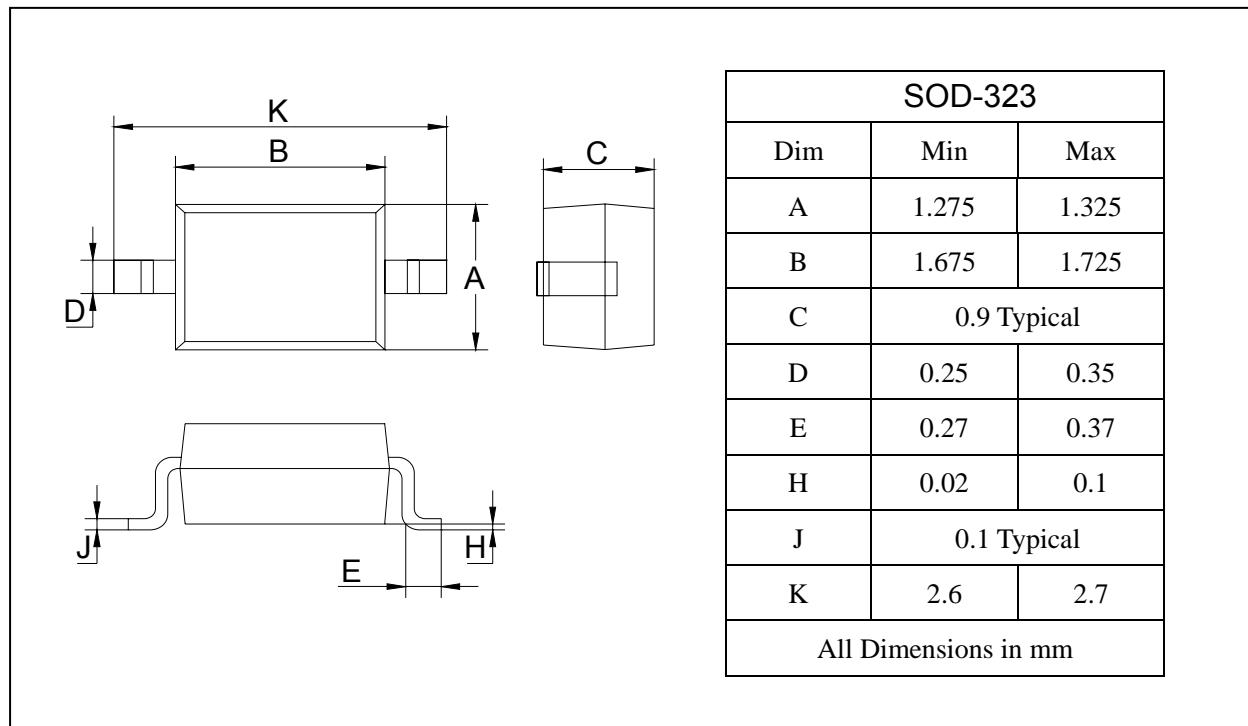
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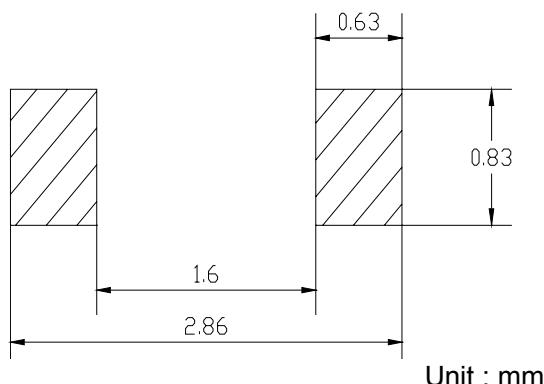
## PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



## SOLDERING FOOTPRINT



Unit : mm

## PACKAGE INFORMATION

Device	Package	Shipping
SD101AWS-SD101CWS	SOD-323	3000/Tape&Reel