



# SD101AWS~SD101CWS

## SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 40 to 60 Volts **CURRENT** 0.35 Amperes

**SOD-323**

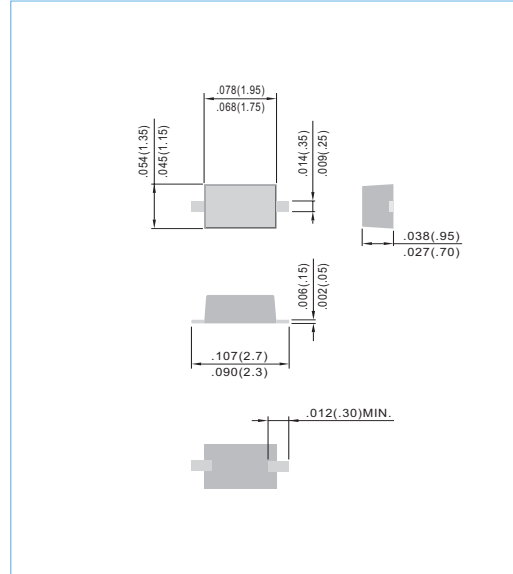
Unit: inch (mm)

### FEATURES

- Very Low VF : 0.41V (Typ) at  $I_F=1\text{mA}$
- Low Capacitance : 2pF (Typ) at  $V_R=1\text{V}$
- Extremely Fast Switching Speed
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

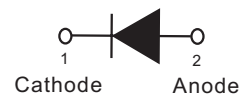
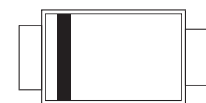
- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.008 gram
- Polarity : Color band cathode



### ABSOLUTE RATINGS AND THERMAL CHARACTERISTICS

PARAMETER	Symbol	Value			Units
		SD101AWS	SD101BWS	SD101CWS	
Marking		S2	S3	S4	
Maximum DC and Peak Reverse Voltage	$V_R, V_{RRM}$	60	50	40	V
Maximum Forward Surge Current $t=0.01\text{ms}$	$I_{FSM}$	2			A
Power Dissipation (Notes 1)	$P_{TOT}$	400			mW
Thermal Resistance, Junction to Ambient (Notes 1)	$R_{\theta JA}$	250			$^{\circ}\text{C/W}$
Junction Temperature	$T_J$	-55 to 125			$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 to 125			$^{\circ}\text{C}$

Note : 1.FR-4 Board = 70 x 60 x 1mm.





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

PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units	
Reverse Breakdown Voltage	V <sub>(BR)</sub>	SD101AWS	60			V	
		SD101BWS	50				
		SD101CWS	40				
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =50V	-	-	0.2	μA	
		V <sub>R</sub> =40V	-	-	0.2		
		V <sub>R</sub> =30V	-	-	0.2		
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1mA	SD101AWS	-	-	0.41	V
			SD101BWS	-	-	0.40	
			SD101CWS	-	-	0.39	
		I <sub>F</sub> =15mA	SD101AWS	-	-	1.00	V
SD101BWS	-		-	0.95			
Total Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1.0MHz	SD101AWS	-	-	2.0	pF
			SD101BWS	-	-	2.1	
			SD101CWS	-	-	2.2	
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =5mA, I <sub>rr</sub> =0.1I <sub>R</sub>	-	-	1.0	ns	

### ELECTRICAL CHARACTERISTICS CURVES

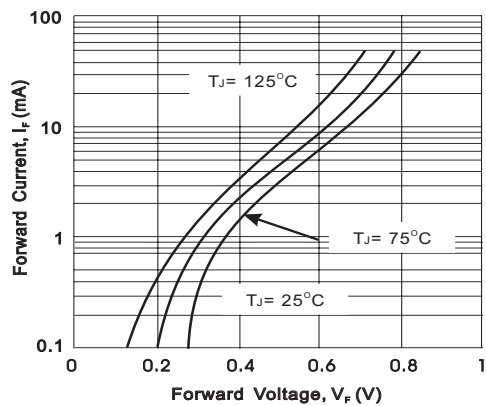


Fig.1- TYPICAL FORWARD VOLTAGE

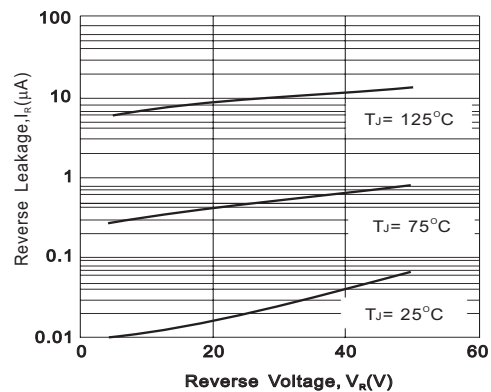


Fig.2- TYPICAL REVERSE CURRENT

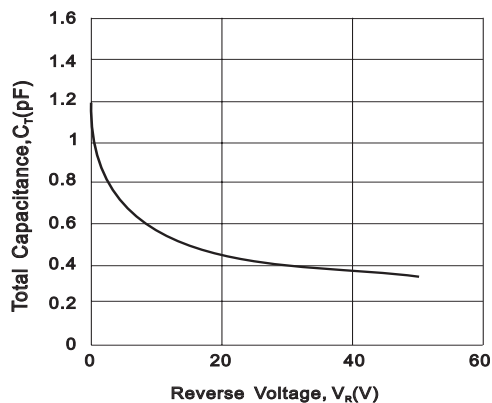
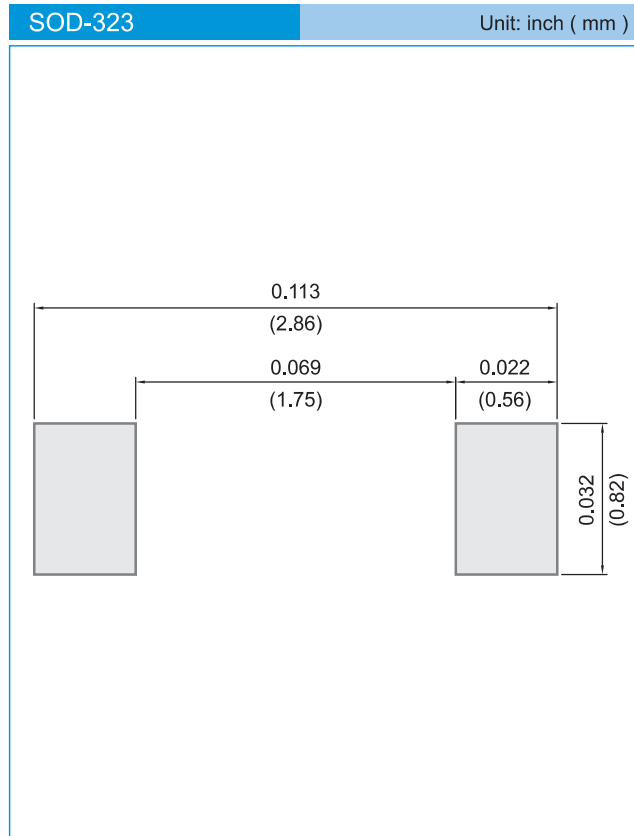


Fig.3- TYPICAL TOTAL CAPACITANCE



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 5K per 7" plastic Reel

## LEGAL STATEMENT

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