



SD101AW~SD101CW

SURFACE MOUNT SCHOTTKY BARRIER

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

SOD-123

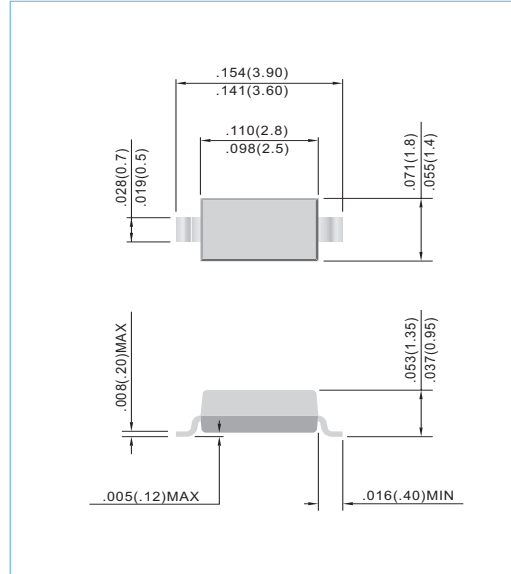
Unit: inch (mm)

FEATURES

- Very Low VF : 0.36V (Typ) at $I_F=1\text{mA}$
- Low Capacitance : 0.95pF (Typ) at $V_R=1\text{V}$
- Extremely Fast Switching Speed
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SOD-123, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.008 gram



ABSOLUTE RATINGS AND THERMAL CHARACTERISTICS

PARAMETER	Symbol	Value			Units
		SD101AW	SD101BW	SD101CW	
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 ($T_J=25^\circ\text{C}$, unless otherwise noted)

PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units	
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=10\mu\text{A}$	SD101AW	60			V
			SD101BW	50			
			SD101CW	40			
Reverse Leakage Current	I_R	$V_R=50\text{V}$	SD101AW	-	-	0.2	μA
		$V_R=40\text{V}$	SD101BW	-	-	0.2	
		$V_R=30\text{V}$	SD101CW	-	-	0.2	
Forward Voltage	V_F	$I_F=1\text{mA}$	SD101AW	-	-	0.41	V
			SD101BW	-	-	0.40	
		$I_F=15\text{mA}$	SD101AW	-	-	1.00	V
			SD101BW	-	-	0.95	
Total Capacitance	C_J	$V_R=0\text{V}, f=1.0\text{MHz}$	SD101AW	-	-	2.0	pF
			SD101BW	-	-	2.1	
			SD101CW	-	-	2.2	
Reverse Recovery Time	t_{rr}	$I_F=I_R=5\text{mA}, I_{rr}=0.1I_R$	-	-	1.0	ns	

ELECTRICAL CHARACTERISTICS CURVES

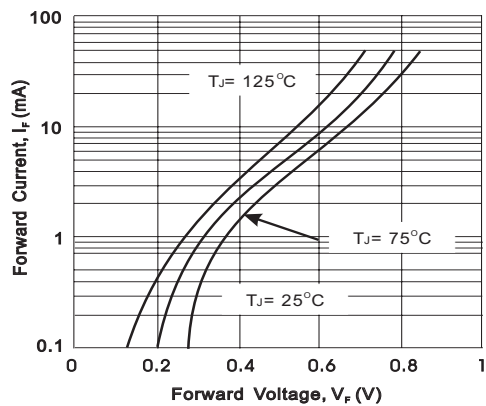


Fig.1- TYPICAL FORWARD VOLTAGE

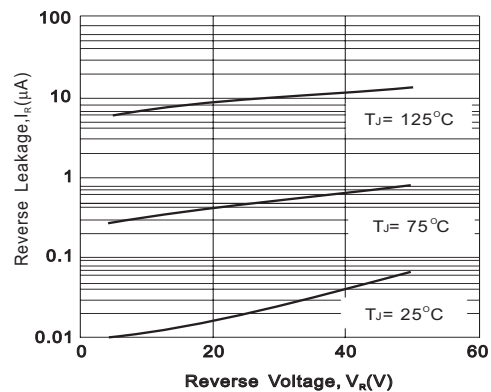


Fig.2- TYPICAL REVERSE CURRENT

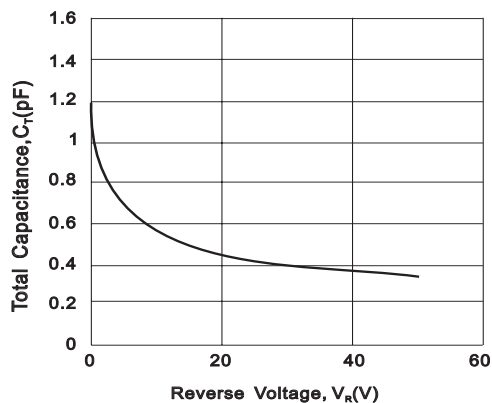


Fig.3- TYPICAL TOTAL CAPACITANCE

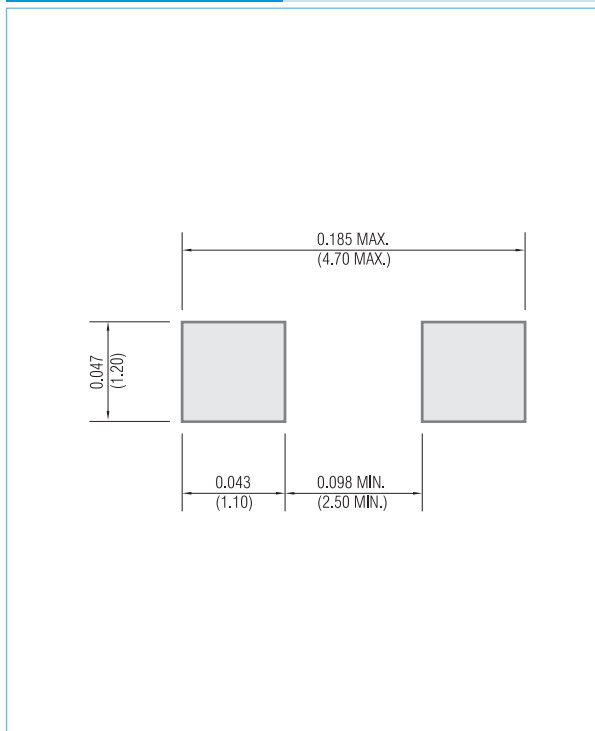


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MOUNTING PAD LAYOUT

SOD-123

Unit: inch (mm)



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

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