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SD101CW S3

產品規格說明書

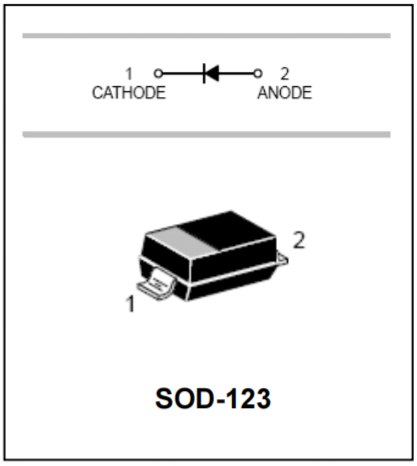
TDSEMIC

Schottky Barrier Diode SD101AW/SD101BW/SD101CW

FEATURES

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

Lead-free



APPLICATIONS

- Schotty 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℃ unless otherwise specified

Parameter	Symbol	SD101AW	SD101BW	SD101CW	Unit
Peak Repetitive Peak reverse voltage Working Peak DC Reverse Voltage	V_{RR} V_{RWM} V_R	60	50	40	V
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 2.0			mA A
Power Dissipation	P_d	400			mW
Thermal Resistance Junction to Ambient	$R_{\Theta jA}$	300			℃/W
Storage temperature	T_{stg}	-65 to +125			℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter		Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	SD101AW	$V_{(BR)R}$	60			V	I_R=10μA
	SD101BW		50				I_R=10μA
	SD101CW		40				I_R=10μA
Forward voltage	SD101AW	V_F			0.41	V	I_F=1.0mA
	SD101BW				0.40		I_F=1.0mA
	SD101CW				0.39		I_F=1.0mA
	SD101AW				1.00		I_F=15mA
	SD101BW				0.95		I_F=15mA
	SD101CW				0.90		I_F=15mA
Reverse current	SD101AW	I_{RM}			0.2	μA	V_R=50V
	SD101BW						V_R=40V
	SD101CW						V_R=30V
Capacitance between terminals	SD101AW	C_T			2.0	pF	V_R=0,f=1MHz
	SD101BW				2.1		
	SD101CW				2.2		
Reverse Recovery Time		t_{rr}			1.0	ns	I_R=I_F=5mA I_{rr}=0.1*I_R,R_L=100Ω

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

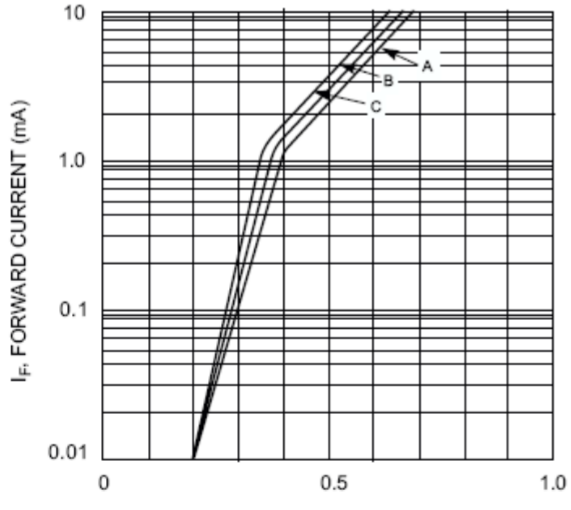


Fig. 1 Typical Forward Characteristic Variations for Primary Conduction

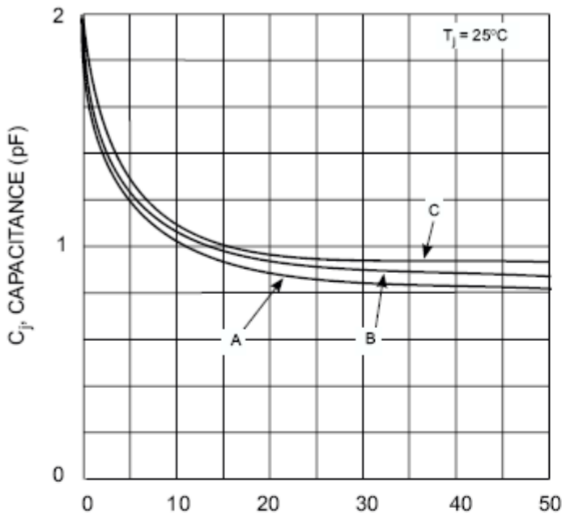
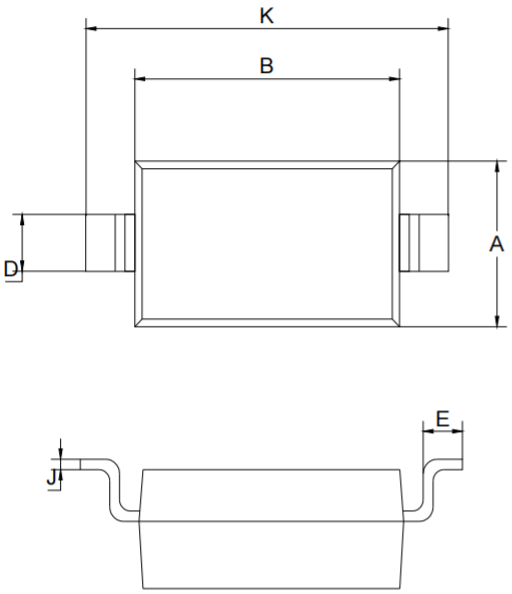


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

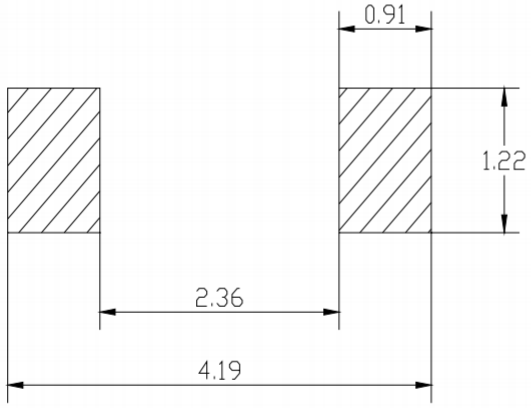
PACKAGE OUTLINE

Plastic surface mounted package SOD-123



SOD-123		
Dim	Min	Max
A	1.4	1.8
B	2.55	2.85
C	1.15 Typical	
D	0.55 Typical	
E	0.3	0.4
H	0.02	0.10
J	0.1 Typical	
K	3.55	3.85
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit：mm

PACKAGE INFORMATION

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