

Schottky Barrier Diode

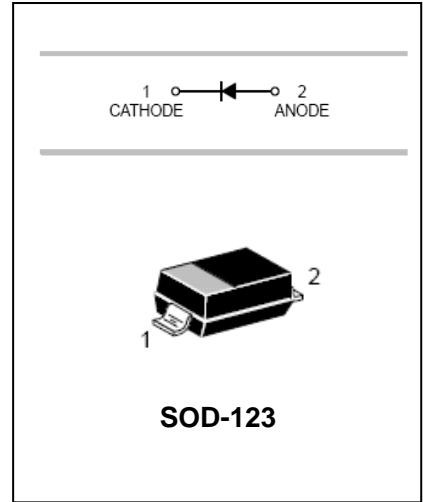
SD103AW/SD103BW/SD103CW

FEATURES

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



Lead-free



APPLICATIONS

- Schottky barrier switching.

ORDERING INFORMATION

Type No.	Marking	Package Code
SD103AW	S4	SOD-123
SD103BW	S5	SOD-123
SD103CW	S6	SOD-123

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	SD103AW	SD103BW	SD103CW	Unit
Peak Repetitive Peak reverse voltage	V_{RR}				
Working Peak DC Reverse Voltage	V_{RWM}	40	30	20	V
	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current	I_F	350			mA
Repetitive Peak Forward Current @t≤1.0s	I_{FRM}	1.5			A
Power Dissipation	P_d	400			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	300			°C/W
Storage temperature	T_{stg}	-65~+125			°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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SD103AW/SD103BW/SD103CW

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	SD103AW SD103BW SD103CW	$V_{(BR)R}$	40 30 20		V	$I_R=10\mu A$ $I_R=10\mu A$ $I_R=10\mu A$
Forward voltage		V_F		0.37 0.60	V	$I_F=20mA$ $I_F=200mA$
Reverse current	SD103AW SD103BW SD103CW	I_{RM}		5.0	μA	$V_R=30V$ $V_R=20V$ $V_R=10V$
Capacitance between terminals		C_T	50		pF	$V_R=0, f=1MHz$
Reverse Recovery Time		t_{rr}	10		ns	$I_R=I_F=200mA$ $t_{rr}=0.1 \cdot I_R, R_L=100\Omega$

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

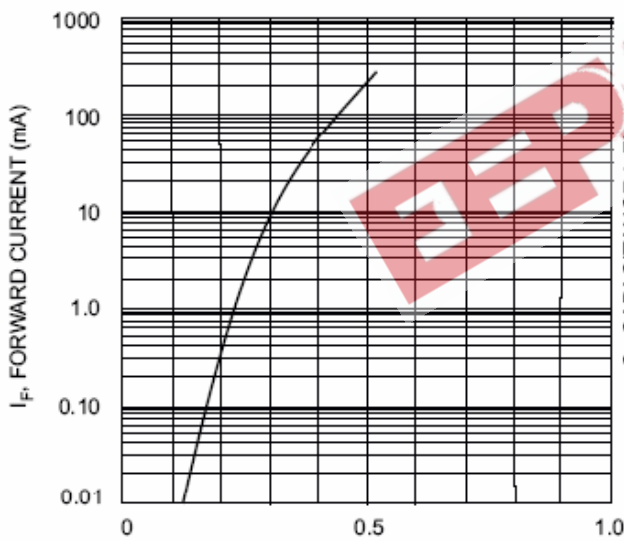


Fig. 1 Typical Forward Characteristics

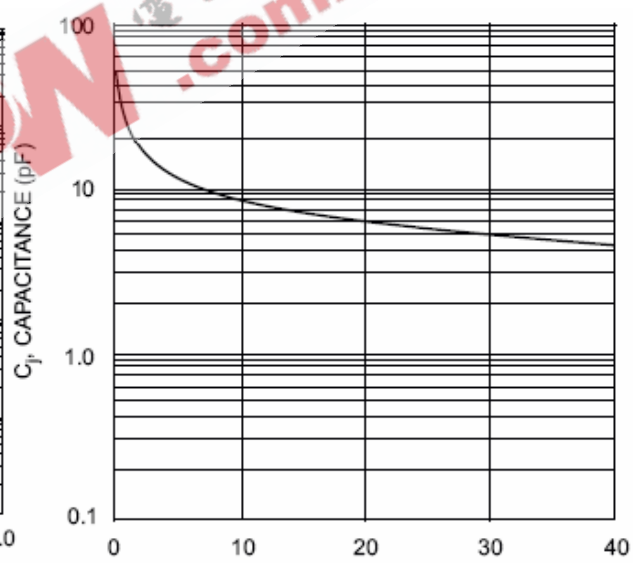


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

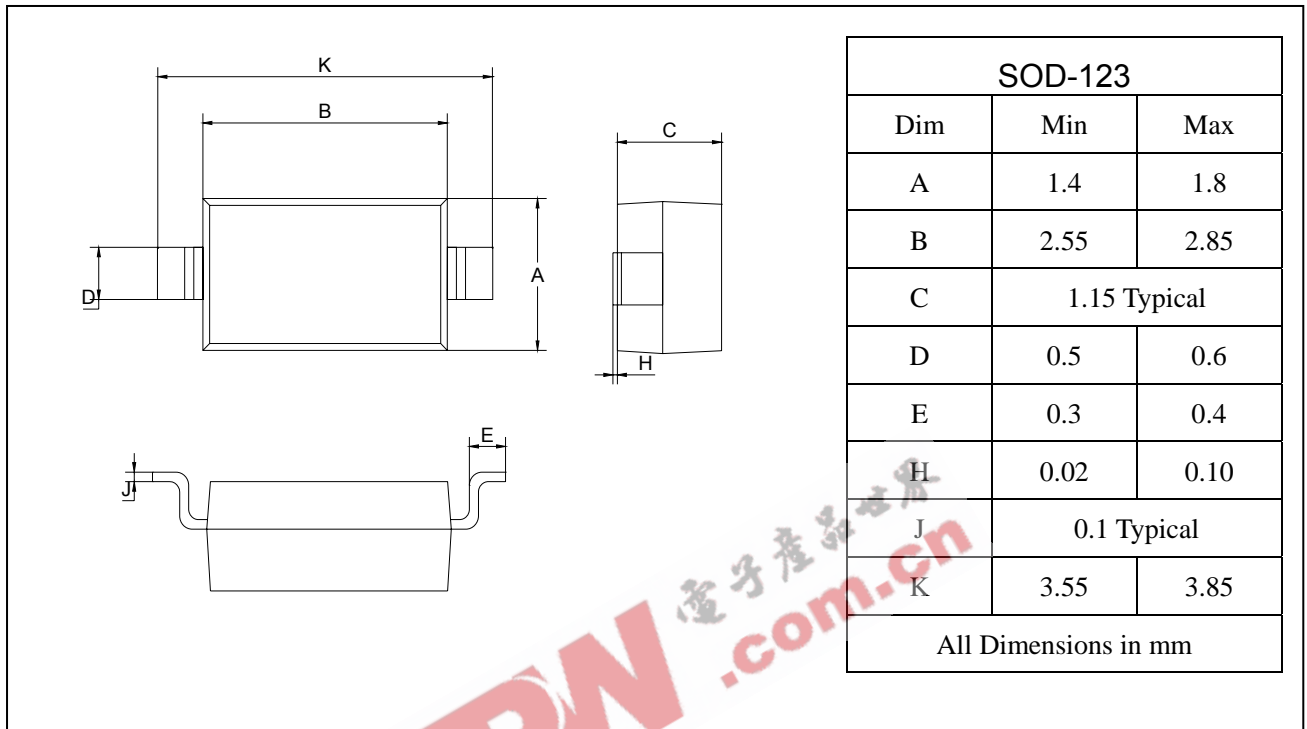
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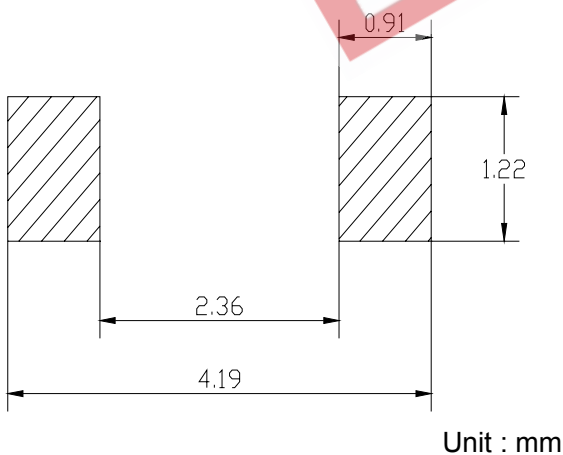
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
SD103AW-SD103CW	SOD-123	3000/Tape&Reel