SD101CW

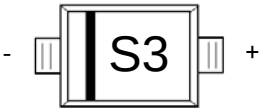
SCHOTTKY BARRIER DIODE

Features

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

SOD-123 top view

Schematic diagram



Marking and pin assignment

Pb-Free RoHS Halogen-Free

Maximum Ratings(T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_R	DC Blocking voltage	40	V
V_{RRM}	Peak Repetitive Peak Reverse Voltage		
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_{FM}	Forward Continuous Current	15	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @t=8.3ms	2	A
P_D	Power Dissipation	400	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	250	°C/W
T_J	Operating Junction Temperature Range	-40~+125	°C
T_{stg}	Storage Temperature Range	-55~+150	°C

ELECTRICAL CHARACTERISTICS(Ta=25℃ unless otherwise specified)

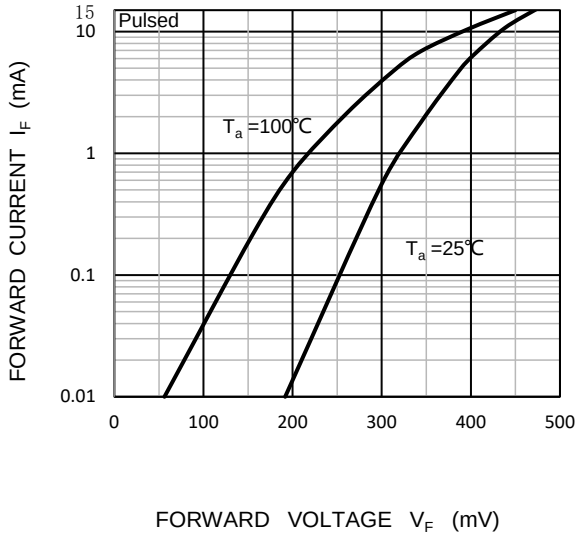
Symbol	Parameter	Condition	Min	Typ	Max	Unit
I_R	Reverse current	V_R=30V	--	--	0.2	μA
V_R	Reverse breakdown voltage	I_R=10μA	40	--	--	V
V_F	Forward voltage	I_F=1mA	--	--	0.39	V
		I_F=15mA	--	--	0.9	
C_T	Capacitance between terminals	V_R=0V, f=1MH$_Z$	--	2.2	--	pF
t_{rr}	Reverse recovery time	I_F=I_R=5mA ,I_{rr}=0.1XI_R,R_L=100Ω	--	--	1	ns

Ordering Information (Example)

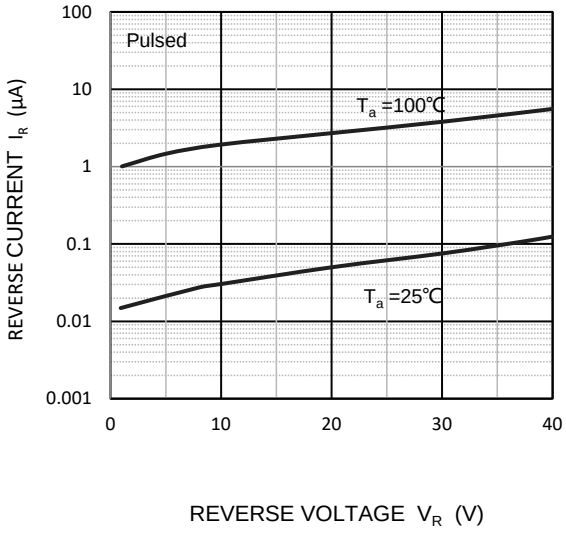
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SD101CW	SOD-123	S3	3,000	45,000	180,000	7"reel

Typical Operating Characteristics

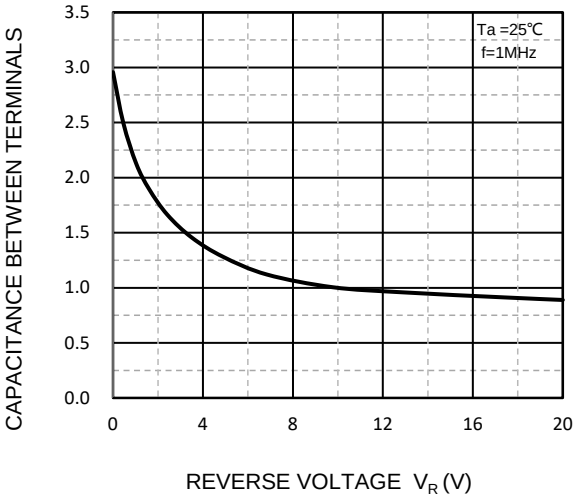
Forward Characteristics



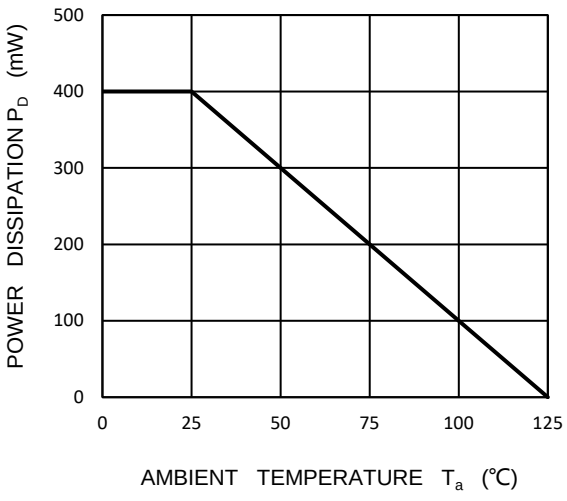
Reverse Characteristics



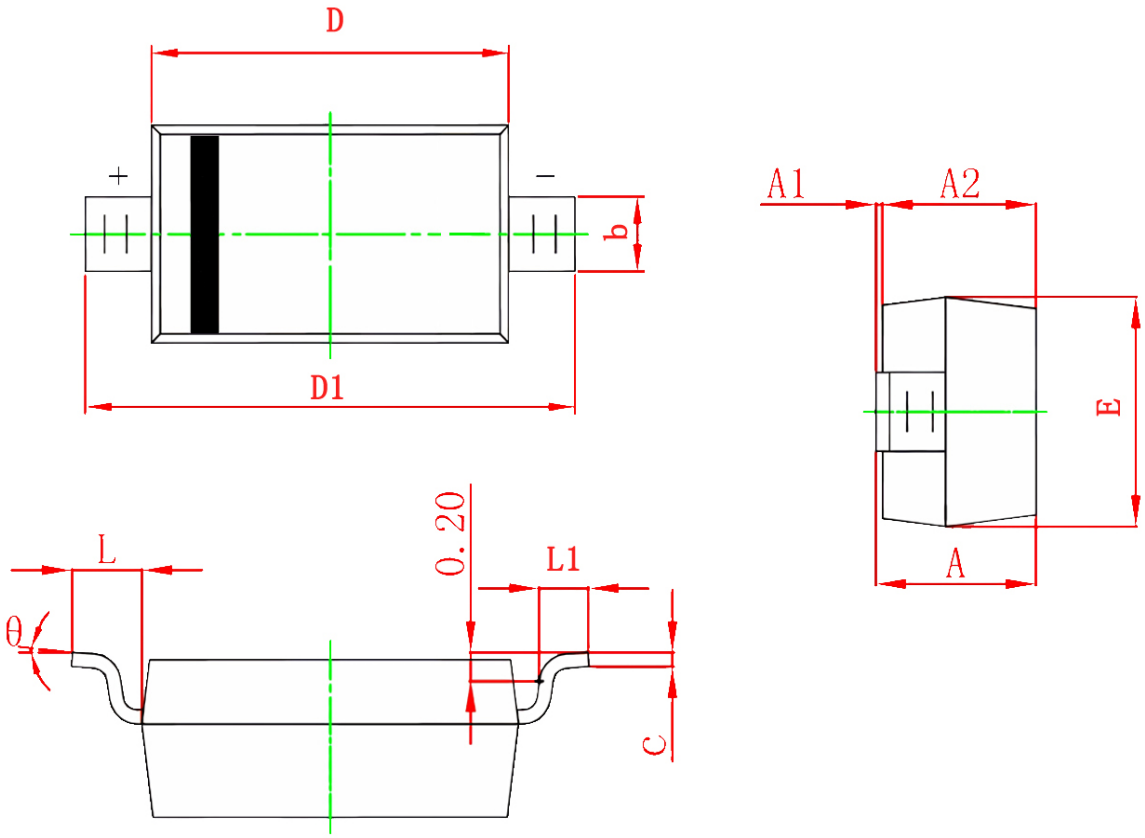
Capacitance Characteristics



Power Derating Curve



SOD-123 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	2.600	2.800	0.102	0.110
D1	3.550	3.850	0.140	0.152
E	1.500	1.700	0.059	0.067
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°