- Guard ring construction for transient protection
- Negligible reverse recovery time
- Packing code with suffix "G" means
  green compound (halogen-free)

SOD-123

MECHANICAL DATA

- Case: SOD-123 small outline plastic package
- Molding compound meets UL 94 V-0 flammability rating
- Terminal: Matte tin plated, lead free,
  solderable per MIL-STD-202, Method 208 guar
- High temperature soldering guaranteed : 260°C/10s
- Polarity: Indicated by cathode band
- Weight: 0.01 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)					
PARAMETER		SYMBOL	SD101AW	SD101BW	SD10
Peak Repetitive Reverse Voltage		V_{RRM}	60	50	4(
Working Peak Reverse Voltage		V_{RWM}			
DC Blocking Voltage		V_R			
RMS Reverse Voltage		$V_{R(RMS)}$	42	35	28
Forward Continue Current	(Note 1)	I_{FM}	15		
Non-Repetitive Peak Forward Surge Current	@ t ≦ 1.0 s	I_{FSM}	50		
	@ t = 10 μs		2		
Power Dissipation	(Note 1)	P_d	400		
Thermal Resistance Junction to Ambient	(Note 1)	$R_{\theta JA}$	300		
Operating and Storage Temperature Range		T_J , T_{STG}	-65 to +125		

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	SD101CW	I_R = 10 μA		40	
Peak Reverse Current	SD101AW	V_R = 50 V	I_R		200
	SD101BW	V_R = 40 V			
	SD101CW	V_R = 30 V			
Forward Voltage Drop	SD101AW	I_R = 1.0 mA	V_F	-	0.41
(Note 2)	SD101BW	I_R = 1.0 mA			0.40
	SD101CW	I_R = 1.0 mA			0.39
	SD101AW	I_R = 15 mA			1.00
	SD101BW	I_R = 15 mA			0.95
	SD101CW	I_R = 15 mA			0.90
Junction Capacitance	V_R = 0 V , f = 1.0 MHz		C_J	-	
	SD101AW				2.0
	SD101BW				2.1
	SD101CW				2.2
Reverse Recovery Time	$I_F = I_R$ = 5.0 mA		t_{rr}	-	1.0
	$I_{rr} = 0.1 \times I_R$, R_L = 100 Ω				

Note 1: Valid provided that terminals are kept at ambient temerature.

Note 2: Pulse test: pulse width = 300 μs , duty cycle ≦ 2%.

RATINGS AND CHARACTERISTICS CURVES

(T_A=25℃ unless otherwise noted)

Fig.1 Typical Forward Characteristics

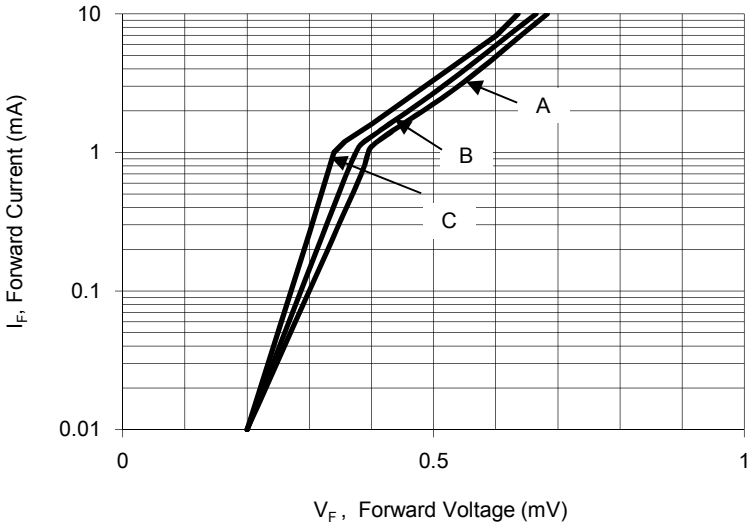
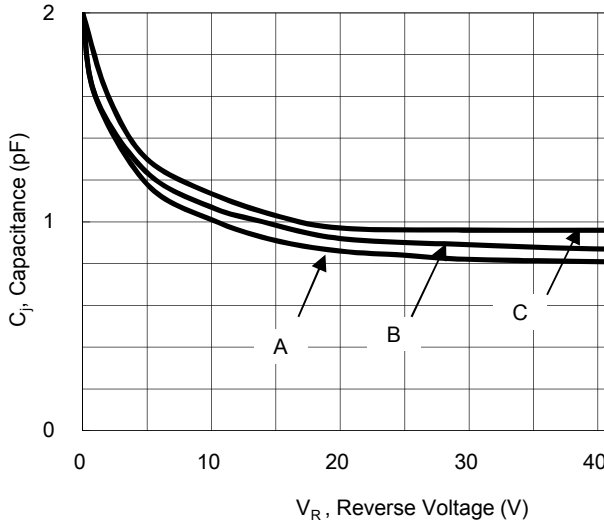


Fig. 2 Typ. Junction Capacitance VS. Reverse V



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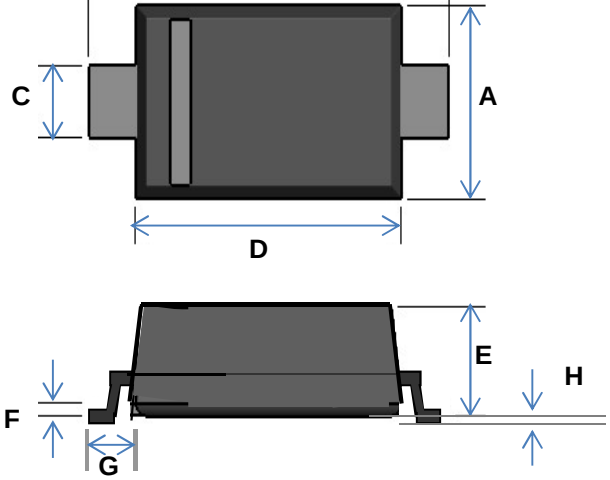
Note 1: "x" is Device Code from "A" thru "C".

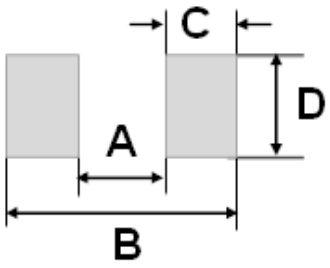
Note 2: Part No. Suffix „-xx “ would be used for special requirement

EXAMPLE					
PREFERRED PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRI
SD101AW RH	SD101AW		RH		Multiple ma sour
SD101AW RHG	SD101AW		RH	G	Multiple ma sour Green cor
SD101AW-D0 RFG	SD101AW	-D0	RF	G	Define mar sour Green cor



DIM.	Min	Max	M
A	1.40	1.80	0.0
B	3.55	3.85	0.1
C	0.45	0.70	0.0
D	2.55	2.85	0.1
E	0.95	1.35	0.0
F	0.05	0.15	0.0
G	0.50 REF		
H	-	0.10	

SUGGEST PAD LAYOUT



DIM.	Unit (mm)	
	Typ.	
A	2.36	
B	4.19	
C	0.91	
D	1.22	

MARKING

Part No.	Marking
SD101AW	S1
SD101BW	S2
SD101CW	S3

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