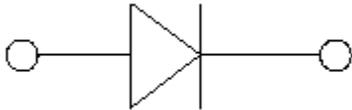


Small Signal Schottky Diode



Features

- V_R 60V/50V/40V
- I_{FM} 15mA

Mechanical Data

- **Package:** SOD123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

	Marking
SD101AW	S1
SD101BW	S2
SD101CW	S3

■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE	
Reverse voltage	V_R	V	$I_R=10\mu A$	SD101AW	60
				SD101BW	50
				SD101CW	40
Forward continuous current	I_{FM}	mA	$T_a=25^\circ C$	15	
Repetitive Peak Forward Current	I_{FRM}	A	$t_p=1ms, \delta=0.25$	0.07	
Power dissipation	P_D	mW		400	
Maximum junction temperature	T_j	°C		125	
Storage temperature range	T_{stg}	°C		-55 to +150	
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	°C /W		250	



SD101AW THRU SD101CW

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions		VALUE	
Maximum Forward voltage	V _F	V	I _F =1mA, T _A =25°C		0.41	
	V _F	V	I _F =15mA, T _A =25°C		1.0	
Maximum Reverse current	I _R	uA	SD101AW	V _R =50V, T _A =25°C	0.2	
			SD101BW	V _R =40V, T _A =25°C		
			SD101CW	V _R =30V, T _A =25°C		
Minimum Breakdown voltage	V _(BR)	V	I _R =10uA		SD101AW	60
					SD101BW	50
					SD101CW	40
Maximum Junction capacitance	C _J	pF	V _R =1V, f =1MHz		2	

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SD101AW THRU SD101CW	F2	Approximate 0.011	3000	30000	120000	7" reel



SD101AW THRU SD101CW

■ Characteristics (Typical)

Fig 1: P_D-T_a Curve

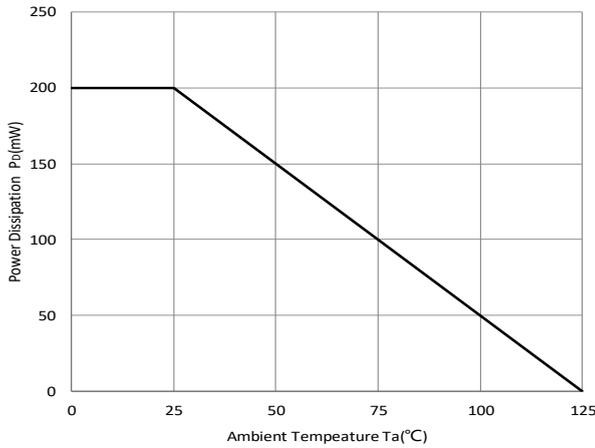


Fig 2: Capacitance Capability

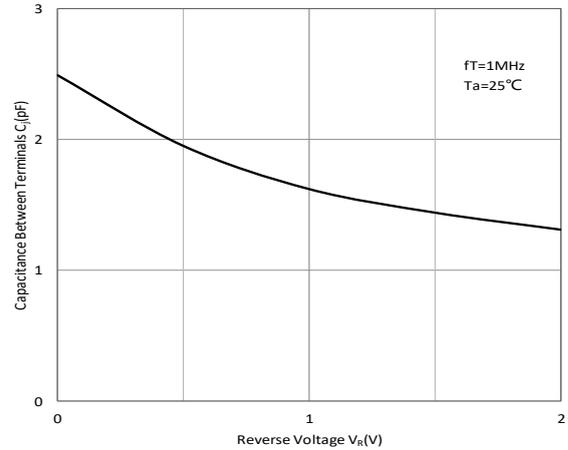


Fig 3: Typical Forward Characteristics

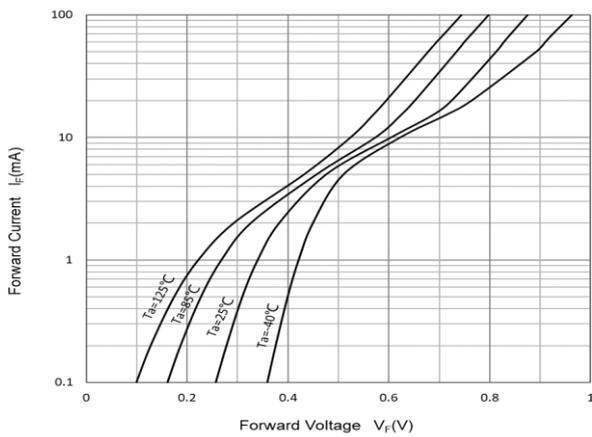
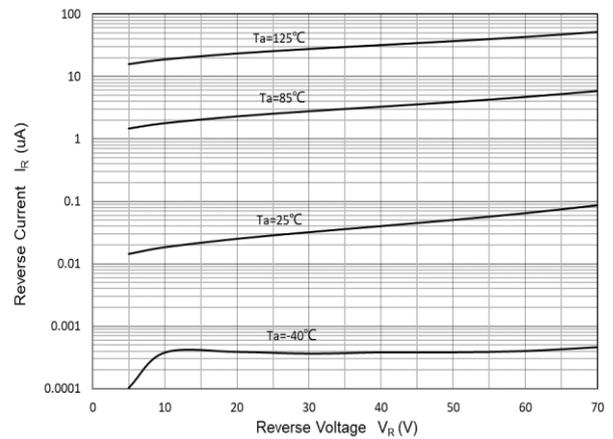


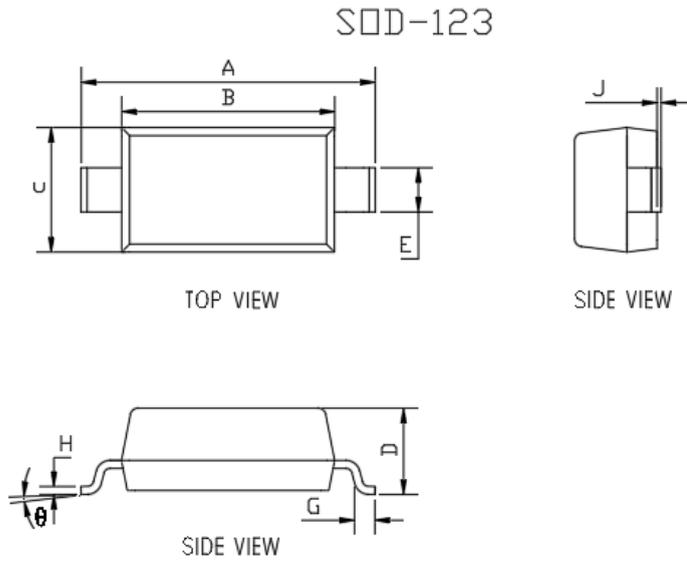
Fig 4: Typical Reverse Characteristics





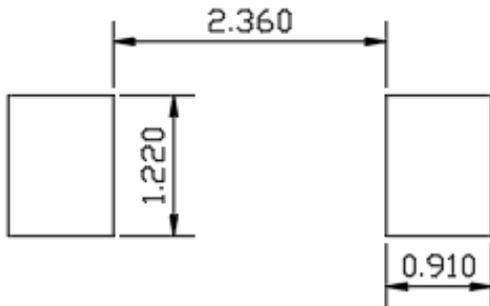
SD101AW THRU SD101CW

■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.140	0.152	3.550	3.850
B	0.100	0.112	2.550	2.850
C	0.055	0.071	1.400	1.800
D	0.037	0.053	0.950	1.350
E	0.020	0.028	0.510	0.710
G	0.006	0.018	0.150	0.450
H	0.003	0.010	0.080	0.250
J	0.000	0.006	0.000	0.150
θ	0	8°	0	8°

■ Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT

Note:

- All dimensions are in millimeters (mm) unless otherwise specified.
[所有尺寸均以毫米为单位, 除非另有说明]
- General tolerances: $\pm 0.10\text{mm}$ unless otherwise specified.
[通用公差为 $\pm 0.10\text{mm}$, 除非另有说明]
- Dimensions and tolerances per ASME Y14.5M-2018.
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
- All dimensions shown are exclusive of burrs and gate residues.
Burrs and gate vestiges shall not exceed 0.15 mm in maximum.
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
- Dimension b does not include dambar protrusion of max 0.100 mm per side.
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
- Dimensions B and C are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.
[B和C是塑封体的外部极限尺寸, 不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺, 但是包含了包封错位的最大尺寸]



SD101AW THRU SD101CW

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