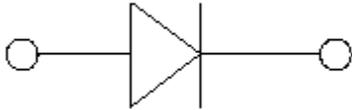


## Small Signal Schottky Diode



### Features

- $V_R$  60V/50V/40V
- $I_{FAV}$  70mA

### Mechanical Data

- **Package:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

	Marking
SD101AWS	S1
SD101BWS	S2
SD101CWS	S3

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE	
Reverse voltage	$V_R$	V	$I_R=10\mu A$	SD101AWS	60
				SD101BWS	50
				SD101CWS	40
Average forward current	$I_{FAV}$	mA	$T_c=25^\circ C$	70	
Repetitive Peak Forward Current	$I_{FRM}$	A	$tp=1ms, \delta=0.25$	0.07	
Power dissipation	$P_D$	mW		200	
Maximum junction temperature	$T_j$	°C		-55 to +125	
Storage temperature range	$T_{stg}$	°C		-55 to +150	
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	°C /W		500	



## SD101AWS THRU SD101CWS

### ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions		VALUE	
Maximum Forward voltage	V <sub>F</sub>	V	I <sub>F</sub> =1mA, T <sub>A</sub> =25°C		SD101AWS	0.41
					SD101BWS	0.4
	V <sub>F</sub>	V	I <sub>F</sub> =15mA, T <sub>A</sub> =25°C		SD101CWS	0.39
					1.0	
Maximum Reverse current	I <sub>R</sub>	uA	SD101AWS	V <sub>R</sub> =50V, T <sub>A</sub> =25°C	0.2	
			SD101BWS	V <sub>R</sub> =40V, T <sub>A</sub> =25°C		
			SD101CWS	V <sub>R</sub> =30V, T <sub>A</sub> =25°C		
Minimum Breakdown voltage	V <sub>(BR)</sub>	V	I <sub>R</sub> =10uA		SD101AWS	60
					SD101BWS	50
					SD101CWS	40
Maximum Junction capacitance	C <sub>J</sub>	pF	V <sub>R</sub> =1V, f =1MHz		2	

### ■Ordering Information (Example)

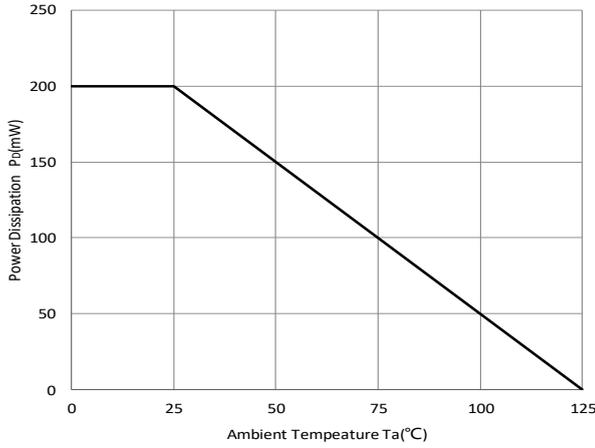
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SD101AWS Thru SD101CWS	F2	Approximate 0.0048	3000	30000	120000	7" reel



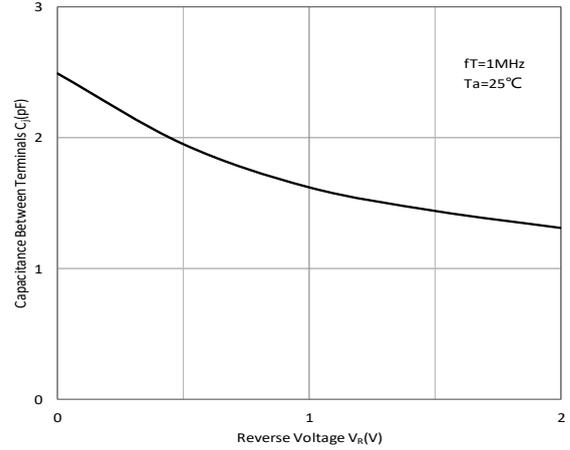
# SD101AWS THRU SD101CWS

## ■ Characteristics (Typical)

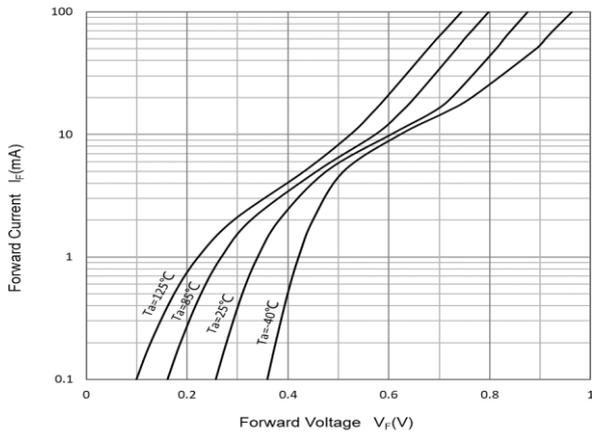
**Fig 1:  $P_D$ - $T_a$  Curve**



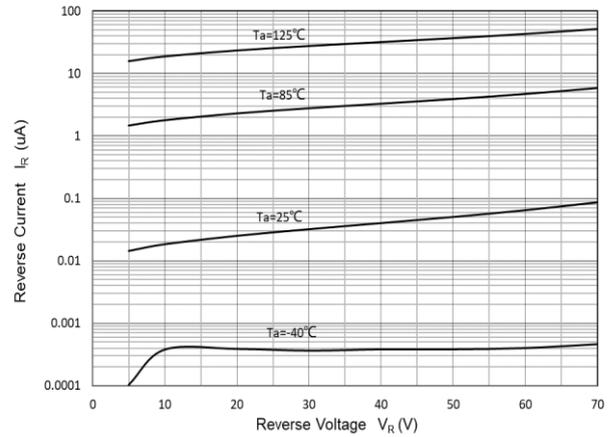
**Fig 2: Capacitance Capability**



**Fig 3: Typical Forward Characteristics**



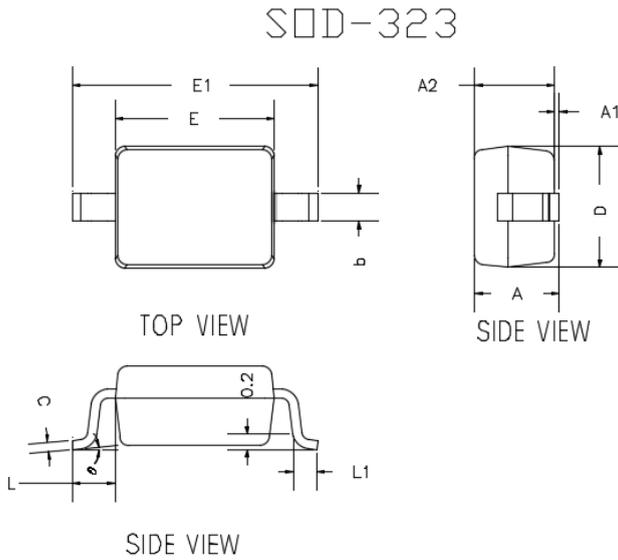
**Fig 4: Typical Reverse Characteristics**





# SD101AWS THRU SD101CWS

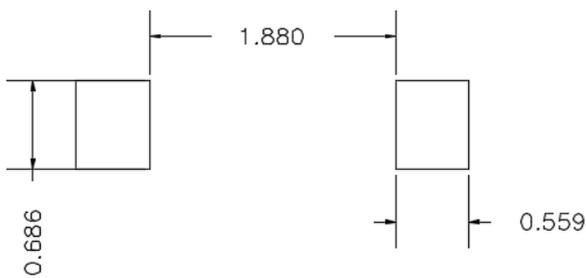
## ■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
e	0°	8°	0°	8°

- NOTES:
- 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.  
Burr 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 D and E 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.  
[D和E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]
  - Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.  
[成型的管脚应为同一平面, 共面性最大为0.1mm]

## ■ Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



## SD101AWS THRU SD101CWS

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