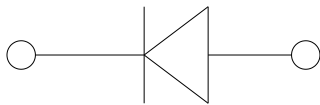
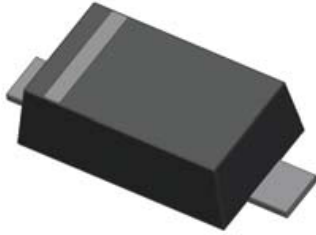


## Schottky Barrier Diode



### Features

- $V_R$  40V
- $I_F$  350mA

### Typical Applications

- Low Forward Voltage Drop

### Mechanical Data

- **Package:** SOD-523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** S4

### ■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Limit Max
DC Reverse Voltage	$V_R$	V		40
Average Rectified Forward Current	$I_{FAV}$	mA		350
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	A	8.3ms single half sine-wave	1.5
Repetitive Peak Forward Current	$I_{FRM}$	A	$t_p=1ms, \delta=0.25$	1
Power Dissipation	$P_D$	mW		150
Junction Temperature	$T_J$	°C		125
Storage Temperature	$T_{STG}$	°C		-40 to +125

### ■ Electrical Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Max
Breakdown Voltage	$V_R$	V	$I_R=100\mu\text{A}$	40	
Forward Voltage	$V_F$	V	$I_F=20\text{mA}$		0.37
		V	$I_F=200\text{mA}$		0.6
Reverse Leakage Current	$I_R$	$\mu\text{A}$	$V_R=30\text{V}$		5
Junction capacitance	$C_J$	pF	$V_R=0\text{V}, f=1\text{MHz}$		50



# SD103AWX

## Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SD103AWX	F2	Approximate 0.0025	8000	80000	320000	7" reel

## Characteristics(Typical)

Fig 1: P<sub>D</sub>-T<sub>a</sub> Curve

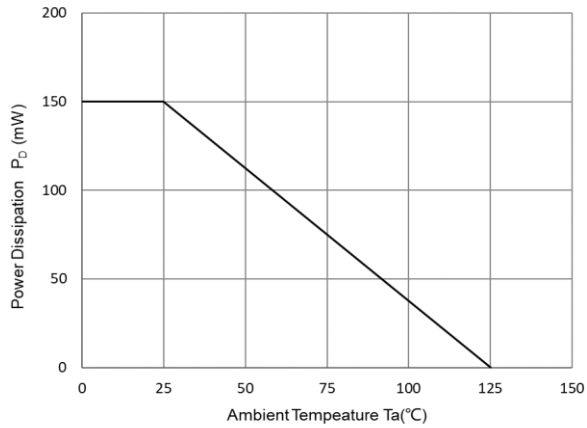


Fig 2: Capacitance Capability

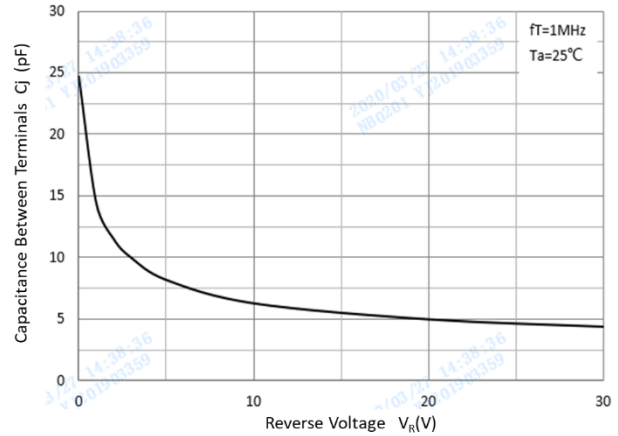


Fig 3: Typical Forward Characteristics

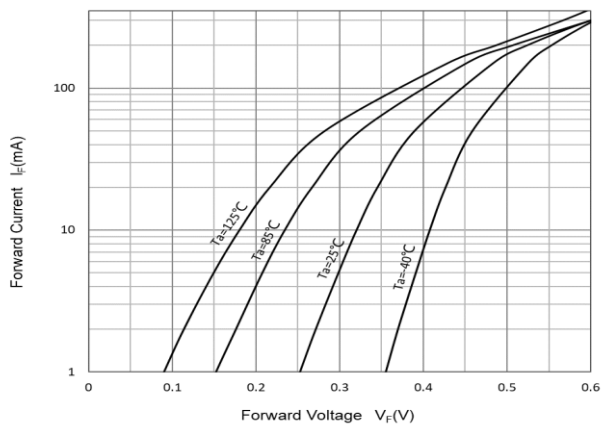
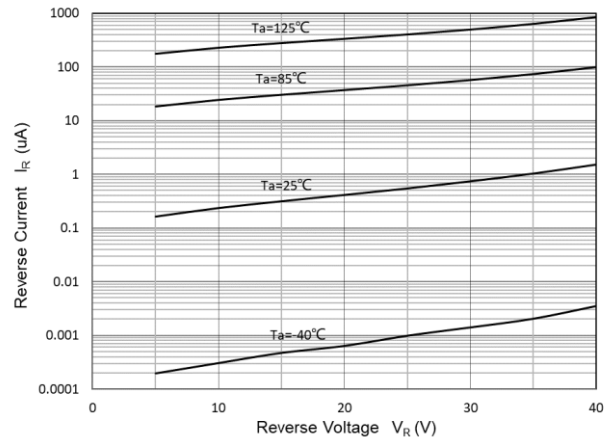


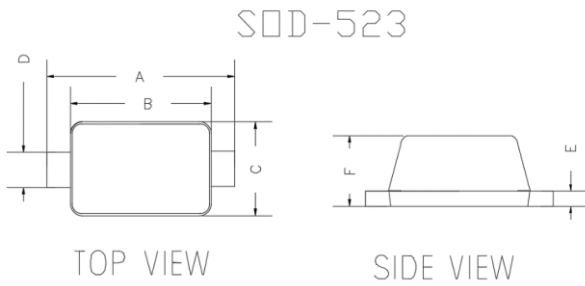
Fig 4: Typical Reverse Characteristics





# SD103AWX

## ■ Outline Dimensions

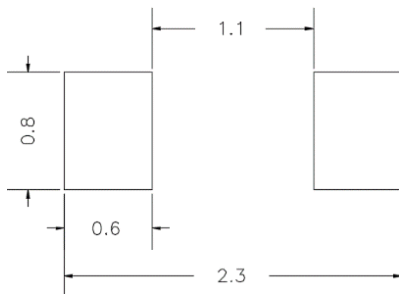


DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.500	1.700
B	0.043	0.051	1.100	1.300
C	0.028	0.035	0.700	0.900
D	0.010	0.014	0.250	0.350
E	0.002	0.008	0.050	0.200
F	0.020	0.028	0.500	0.700

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]
- 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



## SD103AWX

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