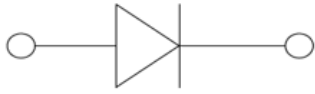


Small Signal Schottky Diode

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- For Surface Mount Application
- V_{RRM} 40V/30V/20V
- I_{FAV} 0.35A
- Part no. with suffix "Q" means AEC-Q101 qualified



SOD323

Mechanical Data

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

■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE	
Repetitive peak reverse voltage	V_{RRM}	V		SD103AWSQ	40
				SD103BWSQ	30
				SD103CWSQ	20
Average Forward Current	I_{FAV}	A		0.35	
Peak Forward Surge Current	I_{FSM}	A	8.3ms, half sine	3	
Power Dissipation	P_D	mW		200	
Thermal Resistance Junction to Ambient	R_{thJA}	$^\circ\text{C}/\text{W}$		500	
Junction Temperature	T_J	$^\circ\text{C}$		-55 to +125	
Storage Temperature Range	T_{stg}	$^\circ\text{C}$		-55 to +150	



SD103AWSQ & SD103BWSQ & SD103CWSQ

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	PART	MIN	MAX
Forward Voltage	V _F	V	I _F =20mA			0.37
			I _F =200mA			0.6
Reverse Leakage Current	I _R	uA	V _R =30V	SD103AWSQ		5
			V _R =20V	SD103BWSQ		5
			V _R =10V	SD103CWSQ		5
Reverse Breakdown Voltage	V _{BR}	V	I _R =100uA	SD103AWSQ	40	
				SD103BWSQ	30	
				SD103CWSQ	20	
Junction Capacitance	C _J	pF	V _R =0V, f =1MHz			50
Reverse Recovery Time	t _{rr}	ns	I _F =I _R =10mA, I _{rr} =1mA, R _L =100Ω			8

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SD103AWSQ SD103BWSQ SD103CWSQ	F2	Approximate 0.0045	3000	30000	120000	7" reel



SD103AWSQ & SD103BWSQ & SD103CWSQ

■ Characteristics (Typical)

Fig.1: P_D-T_A

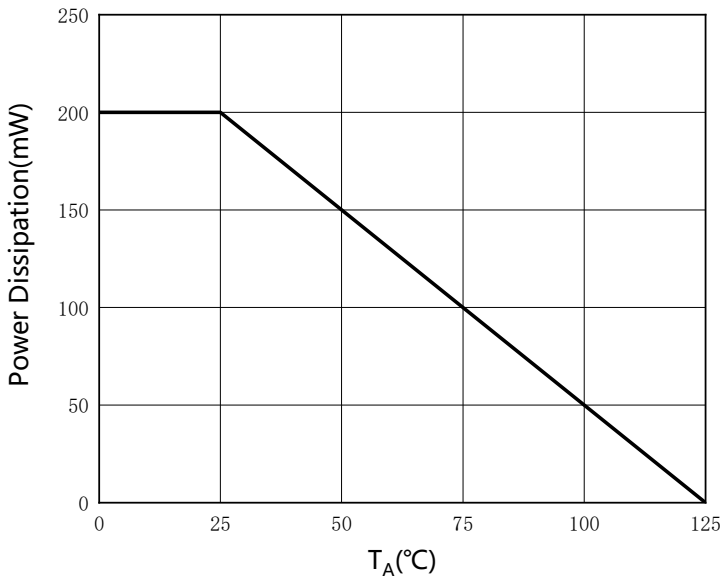


Fig.2: Capacitance Characteristics

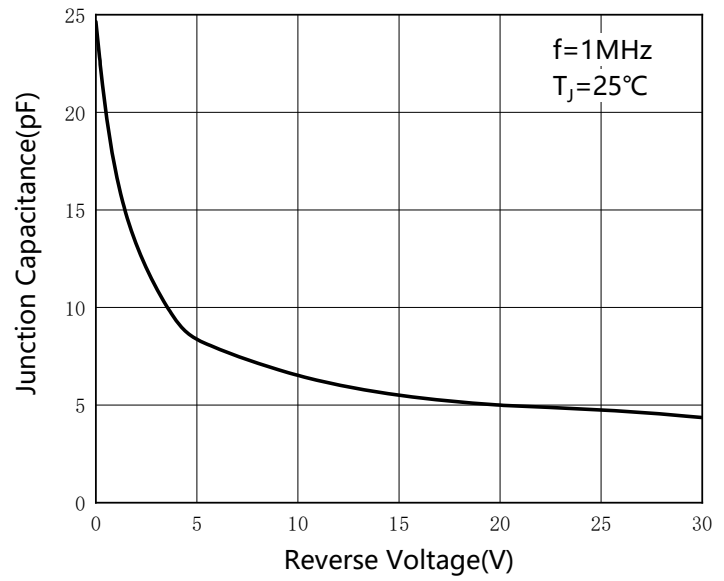


Fig.3: Forward Characteristics

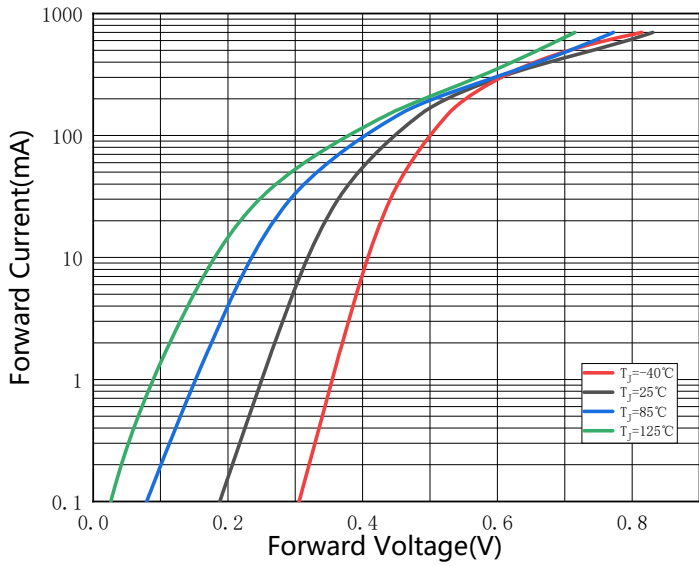
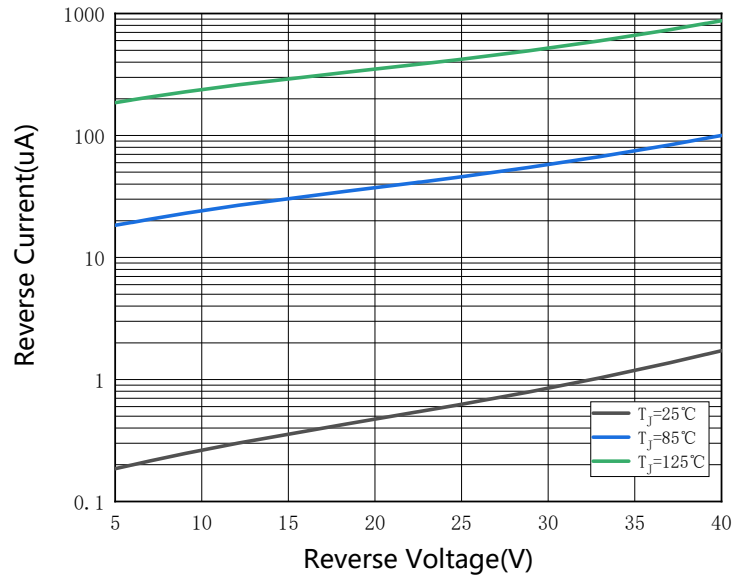


Fig.4: Reverse Characteristics

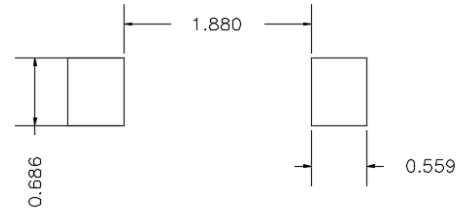
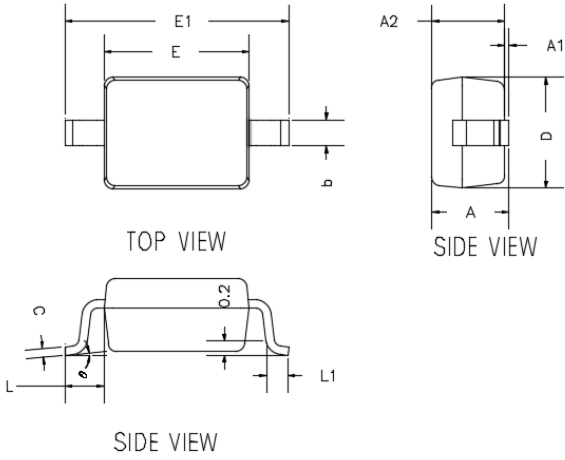




SD103AWSQ & SD103BWSQ & SD103CWSQ

■ Outline Dimensions

SOD-323

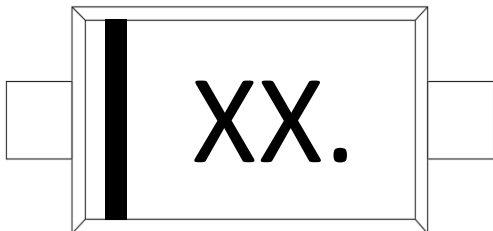


UNIT: mm

SUGGESTED SOLDER PAD LAYOUT

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
θ	0°	8°	0°	8°

■ Marking Information



	Marking
SD103AWSQ	S4
SD103BWSQ	S5
SD103CWSQ	S6

Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. Body color: Black
4. XXX is Marking Code



SD103AWSQ & SD103BWSQ & SD103CWSQ

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with automotive electronics, are not designed for use in medical, life-saving, life-sustaining, or military, Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.