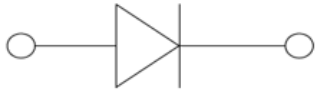


Small Signal Schottky Diode

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_{RRM} 60V/50V/40V
- I_{FAV} 0.07A
- 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		SD101AWSQ	60
				SD101BWSQ	50
				SD101CWSQ	40
Average Forward Current	I_{FAV}	A		0.07	
Peak Forward Surge Current	I_{FSM}	A	8.3ms, half sine	3	
Power Dissipation	P_D	mW		250	
Thermal Resistance Junction to Ambient	R_{thJA}	$^{\circ}\text{C}/\text{W}$		500	
Junction Temperature	T_J	$^{\circ}\text{C}$		-55 to +150	
Storage Temperature Range	T_{stg}	$^{\circ}\text{C}$		-55 to +150	



SD101AWSQ&SD101BWSQ&SD101CWSQ

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	PART	MIN	MAX
Forward Voltage	V _F	V	I _F =1mA	SD101AWSQ		0.41
				SD101BWSQ		0.4
				SD101CWSQ		0.39
			I _F =15mA			1
Reverse Leakage Current	I _R	uA	V _R =50V	SD101AWSQ		0.2
			V _R =40V	SD101BWSQ		0.2
			V _R =30V	SD101CWSQ		0.2
Reverse Breakdown Voltage	V _{BR}	V	I _R =10uA	SD101AWSQ	60	
				SD101BWSQ	50	
				SD101CWSQ	40	
Junction Capacitance	C _J	pF	V _R =1V, f =1MHz			4
Reverse Recovery Time	t _{rr}	ns	I _F =I _R =10mA, I _{rr} =1mA, R _L =100Ω			3

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SD101AWSQ& SD101BWSQ& SD101CWSQ	F2	Approximate 0.0045	3000	30000	120000	7" reel



SD101AWSQ&SD101BWSQ&SD101CWSQ

■ Characteristics (Typical)

Fig.1: P_D-T_A

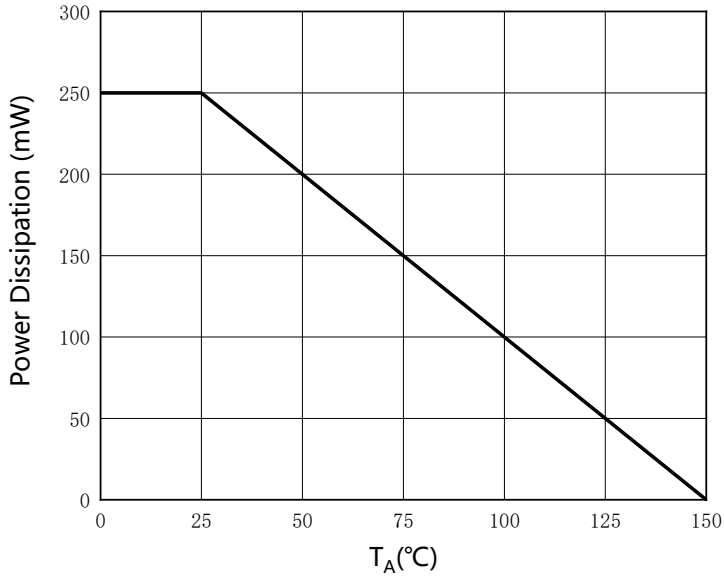


Fig.2: Capacitance Characteristics

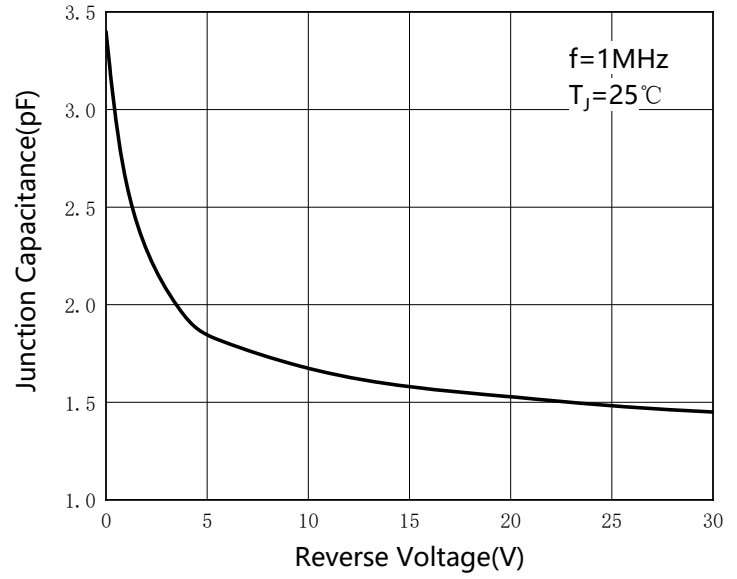


Fig.3: Forward Characteristics

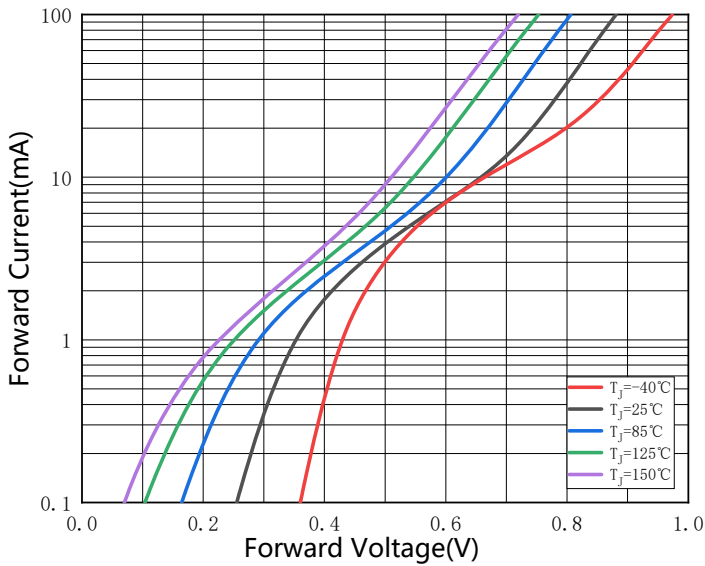
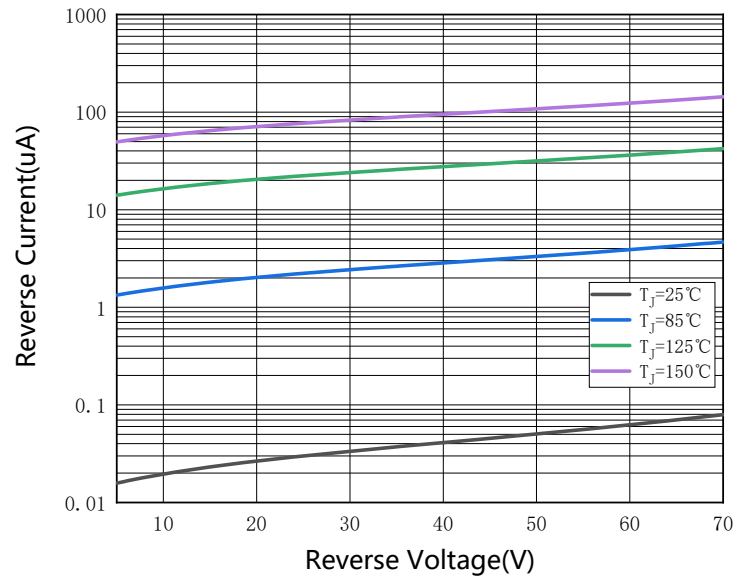


Fig.4: Reverse Characteristics

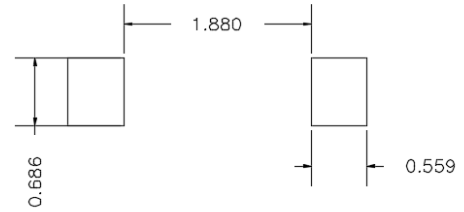
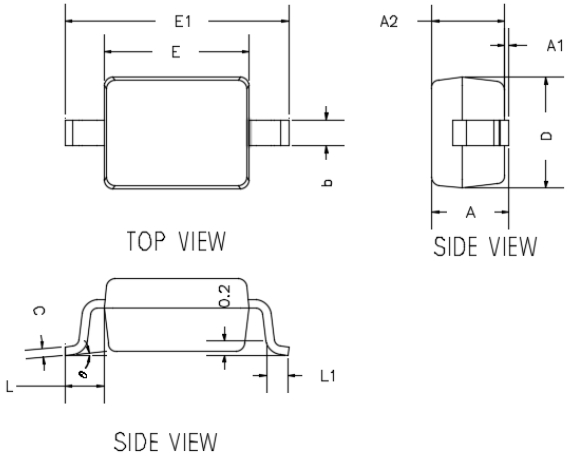




SD101AWSQ&SD101BWSQ&SD101CWSQ

■ Outline Dimensions

SOD-323

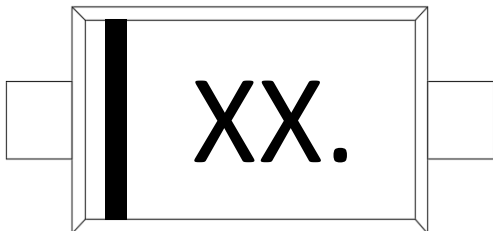


UNIT: mm

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
SD101AWSQ	S1
SD101BWSQ	S2
SD101CWSQ	S3

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



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