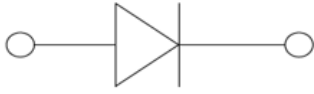




Small Signal Schottky Diode



SOD323

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- For Surface Mount Application
- Part no. with suffix "Q" means AEC-Q101 qualified

Mechanical Data

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

	Marking
SD103AWSQ	S4
SD103BWSQ	S5
SD103CWSQ	S6

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	PART	VALUE
Peak Repetitive 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		1.5
Power Dissipation	P_{tot}	mW			200
Thermal Resistance Junction to Ambient	R_{thJA}	°C/W			500
Maximum Junction Temperature	T_j	°C			125
Storage Temperature Range	T_{stg}	°C			-55 to +150

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	PART	MIN	MAX
Reverse Breakdown Voltage	$V_{(BR)R}$	V	$I_R=100\mu A$	SD103AWSQ	40	-
				SD103BWSQ	30	-
				SD103CWSQ	20	-
Forward Voltage	V_F	V	$I_F=20mA$		-	0.37
Forward Voltage	V_F	V	$I_F=200mA$		-	0.60
Reverse Leakage Current	I_R	μA	$V_R=30V$	SD103AWSQ	-	5
			$V_R=20V$	SD103BWSQ	-	
			$V_R=10V$	SD103CWSQ	-	
Junction Capacitance	C_J	pF	$V_R=0V, f=1MHz$		-	50



SD103AWSQ / SD103BWSQ / SD103CWSQ

■ 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

■ Characteristics(Typical)

Figure 1. FORWARD CHARACTERISTIC

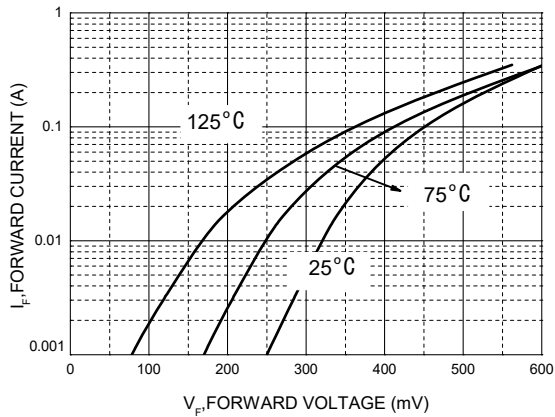


Figure 2. REVERSE CHARACTERISTIC

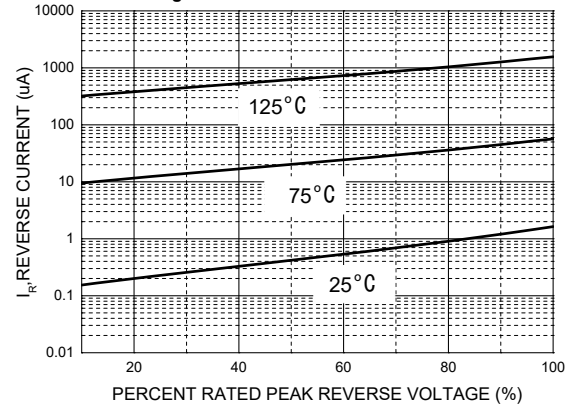
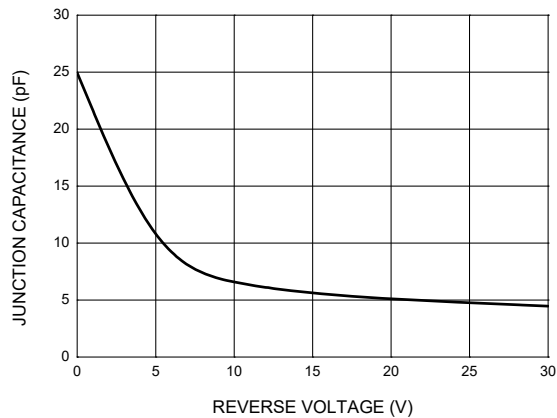


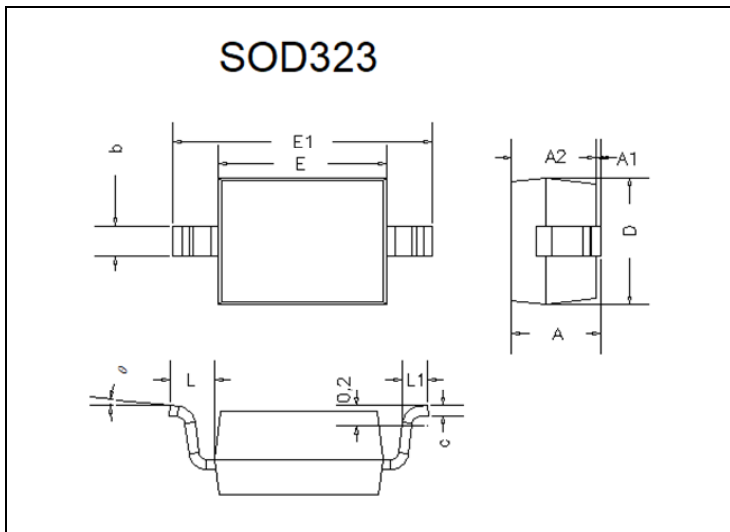
Figure 3. JUNCTION CAPACITANCE





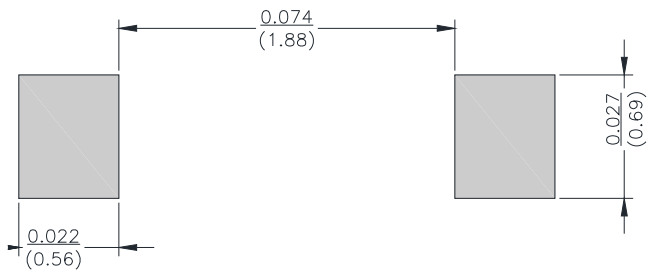
SD103AWSQ / SD103BWSQ / SD103CWSQ

■ Outline Dimensions



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	-	0.039	-	1.00	
A1	0.000	0.004	0.00	0.10	
A2	0.031	0.035	0.80	0.90	
b	0.010	0.016	0.25	0.40	
c	0.003	0.007	0.08	0.17	
D	0.047	0.055	1.20	1.40	
E	0.063	0.071	1.60	1.80	
E1	0.098	0.106	2.50	2.70	
L	0.019REF		0.475REF		
L1	0.008	0.016	0.20	0.40	
θ	0°	8°	0°	8°	

■ Soldering Footprint



Unit: $\frac{\text{inch}}{\text{mm}}$



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