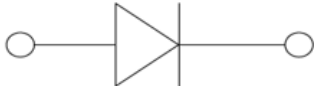




Small Signal Schottky Diode



SOD123

Features

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

Application

- For Surface Mount Application

Mechanical Data

- **Case:** SOD123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:**

	Marking
SD101AWQ	S1
SD101BWQ	S2
SD101CWQ	S3

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	PART	VALUE
Peak Repetitive Reverse Voltage	V_{RRM}	V		SD101AWQ	60
				SD101BWQ	50
				SD101CWQ	40
Average Forward Current	I_{FAV}	A			0.07
Peak Forward Surge Current	I_{FSM}	A	8.3ms, half sine		0.7
Power Dissipation	P_D	mW			400
Thermal Resistance Junction to Ambient	R_{thJA}	°C/W			250
Maximum Junction Temperature	T_J	°C			125
Storage Temperature Range	T_{stg}	°C			-55 to +150



SD101AWQ & SD101BWQ & SD101CWQ

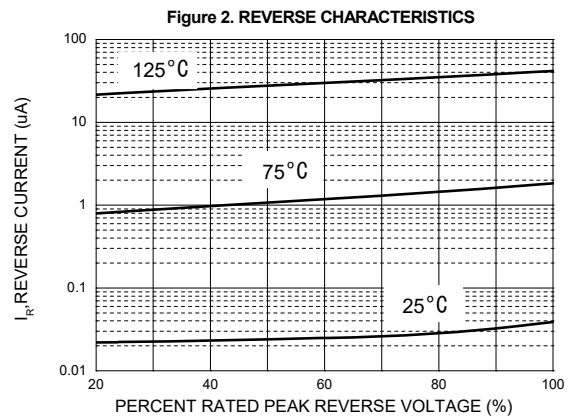
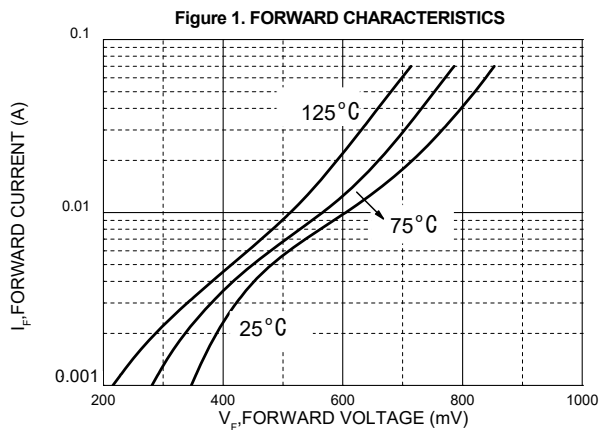
■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	PART	MIN	MAX
Reverse Breakdown Voltage	$V_{(BR)R}$	V	$I_R=10\mu A$	SD101AWQ	60	-
				SD101BWQ	50	-
				SD101CWQ	40	-
Forward Voltage	V_F	V	$I_F=1.0mA$	SD101AWQ	-	0.41
				SD101BWQ	-	0.40
				SD101CWQ	-	0.39
Forward Voltage	V_F	V	$I_F=15mA$		-	1.0
Reverse Leakage Current	I_R	μA	$V_R=50V$	SD101AWQ	-	0.2
			$V_R=40V$	SD101BWQ	-	
			$V_R=30V$	SD101CWQ	-	
Junction Capacitance	C_J	pF	$V_R=1V, f=1MHz$		-	4

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SD101AWQ& SD101BWQ& SD101CWQ	F2	Approximate 0.010	3000	30000	120000	7" reel

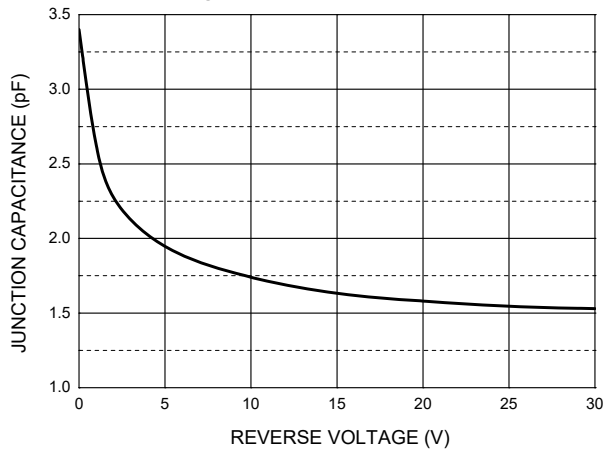
■ Characteristics(Typical)



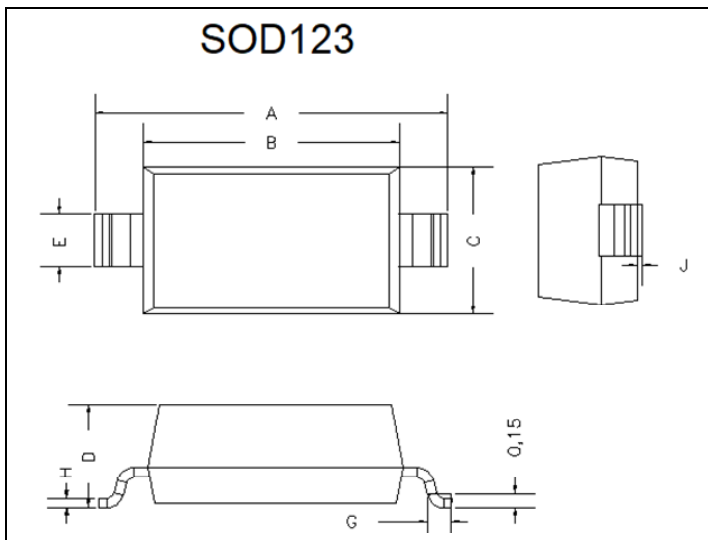


SD101AWQ & SD101BWQ & SD101CWQ

Figure 3. JUNCTION CAPACITANCE

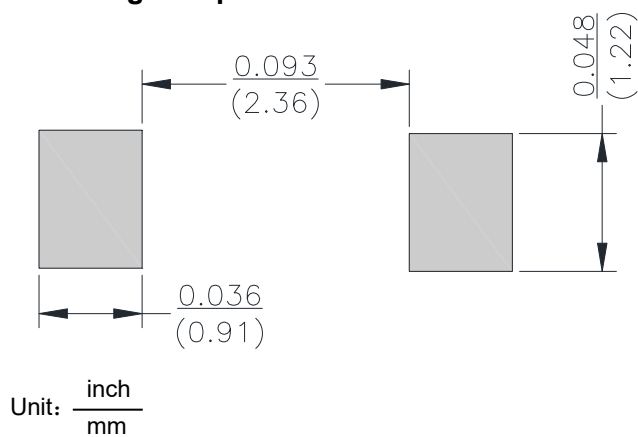


■ Outline Dimensions



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.140	0.152	3.55	3.85	
B	0.100	0.112	2.55	2.85	
C	0.055	0.071	1.40	1.80	
D	-	0.053	-	1.35	
E	0.012	0.031	0.30	0.78	
G	0.006	-	0.15	-	
H	-	0.010	-	0.25	
J	-	0.006	-	0.15	

■ Soldering Footprint





SD101AWQ & SD101BWQ & SD101CWQ

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