



Small Signal Schottky Diode



SOD123

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_R 40V/30V/20V
- I_{FAV} 350mA
- For Surface Mount Application
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

- For general purpose applications

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
SD103AWQ	S4
SD103BWQ	S5
SD103CWQ	S6

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	PART	VALUE
Reverse Voltage	V_R	V		SD103AWQ	40
				SD103BWQ	30
				SD103CWQ	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			400
Thermal Resistance Junction to Ambient	R_{thJA}	°C/W			315
Junction Temperature	T_j	°C			-55 to +125
Storage Temperature Range	T_{stg}	°C			-55 to +150



SD103AWQ / SD103BWQ / SD103CWQ

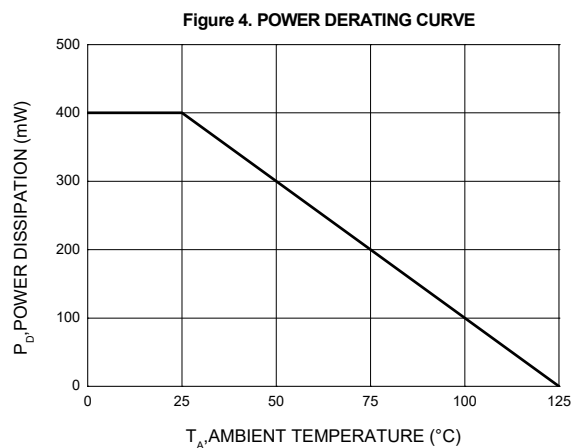
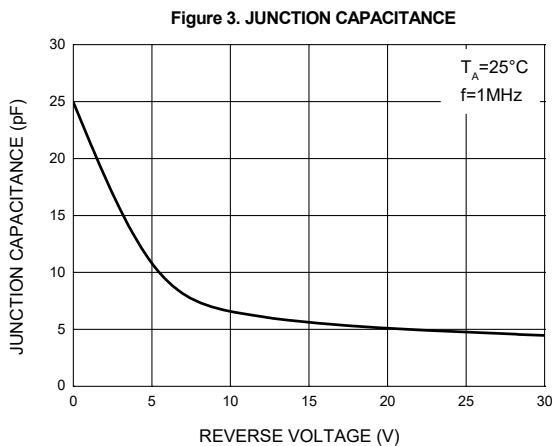
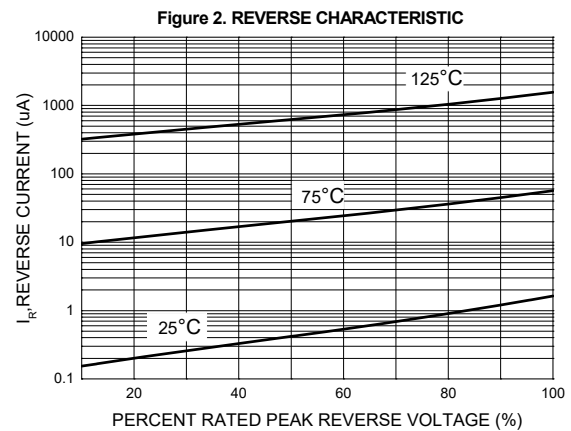
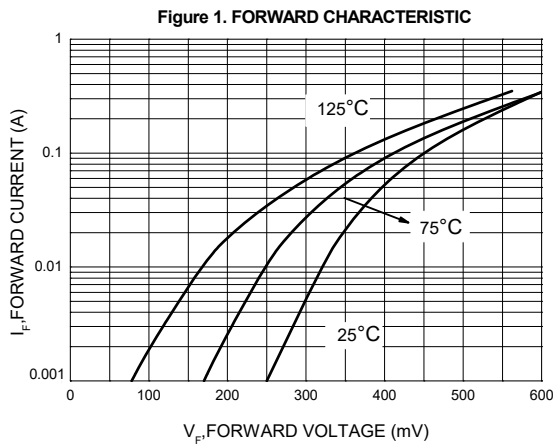
■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	PART	MIN	MAX
Reverse Breakdown Voltage	$V_{(BR)R}$	V	$I_R=100\mu A$	SD103AWQ	40	-
				SD103BWQ	30	-
				SD103CWQ	20	-
Forward Voltage	V_F	V	$I_F=20mA$		-	0.37
	V_F	V	$I_F=200mA$		-	0.60
Reverse Leakage Current	I_R	μA	$V_R=30V$	SD103AWQ	-	5
			$V_R=20V$	SD103BWQ	-	
			$V_R=10V$	SD103CWQ	-	
Junction Capacitance	C_j	pF	$V_R=0V, f=1MHz$		-	50

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SD103AWQ/ SD103BWQ/ SD103CWQ	F2	Approximate 0.010	3000	30000	120000	7" reel

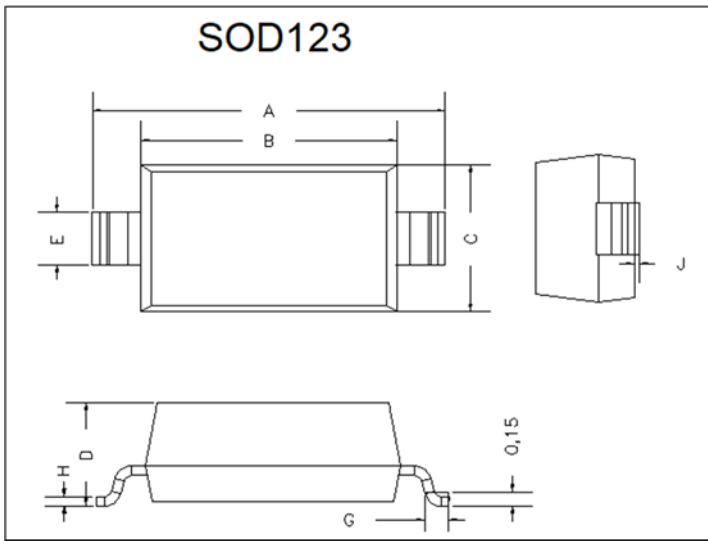
■ Characteristics(Typical)





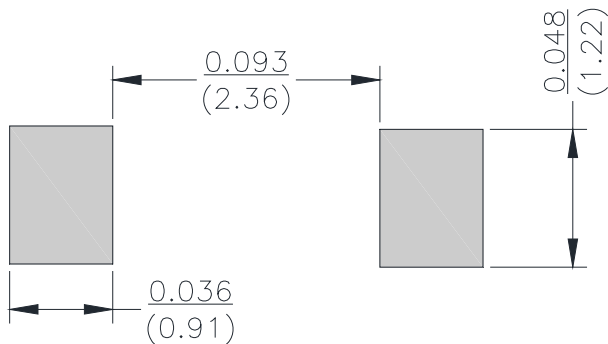
SD103AWQ / SD103BWQ / SD103CWQ

■ 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



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



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