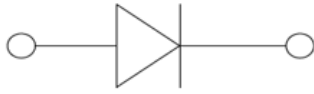


Small Signal Schottky Diode



SOD-123

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- Low Turn-on Voltage
- V_R 100V
- I_{FAV} 0.15A
- Part no. with suffix "Q" means AEC-Q101 qualified

Mechanical Data

- **Case:** SOD-123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** S9

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Repetitive Peak Reverse Voltage	V_{RRM}	V		100
Average Forward Current	I_{FAV}	mA		150
Peak Forward Surge Current	I_{FSM}	A	$t_p=8.3\text{ms}$	0.75
Power Dissipation	P_{tot}	mW		200
Thermal Resistance Junction to Ambient	R_{thJA}	K/W		300
Maximum Junction Temperature	T_j	$^\circ\text{C}$		125
Storage Temperature Range	T_{stg}	$^\circ\text{C}$		-55 to +150

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V_F	V	$I_F=0.1\text{mA}$	-	0.25
			$I_F=10\text{mA}$	-	0.45
			$I_F=250\text{mA}$	-	1.00
Reverse Current	I_R	μA	$V_R=1.5\text{V}$	-	0.3
			$V_R=10\text{V}$		0.5
			$V_R=50\text{V}$		1
			$V_R=75\text{V}$		2
Reverse Breakdown Voltage	V_{BR}	V	$I_R=100\mu\text{A}$	100	-
Diode Capacitance	C_D	pF	$V_R=0\text{ V, } f=1\text{MHz}$	-	20
			$V_R=1\text{ V, } f=1\text{MHz}$	-	12

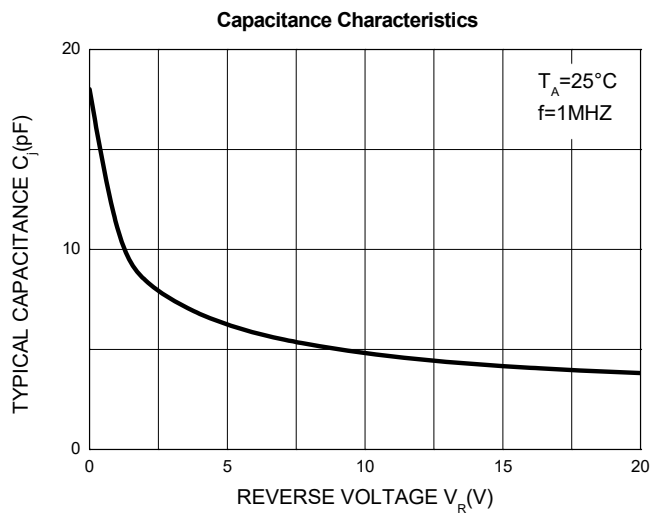
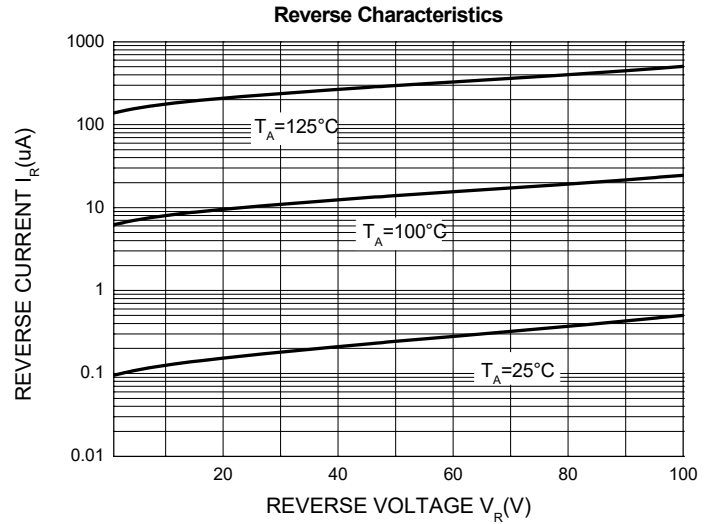
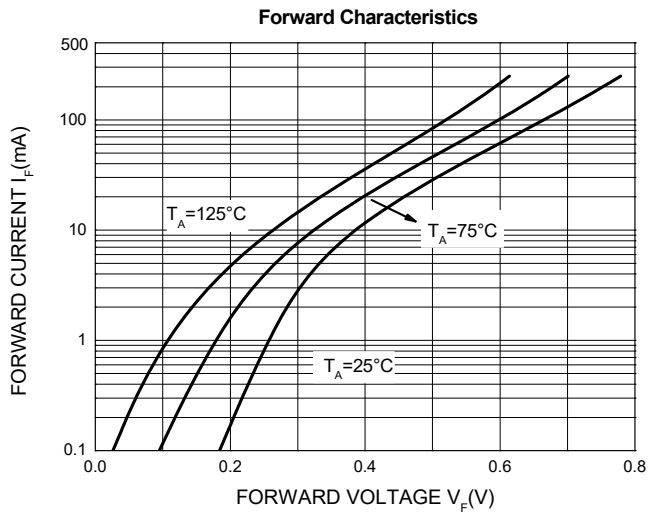


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■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT46WQ	F2	Approximate 0.010	3000	30000	120000	7" reel

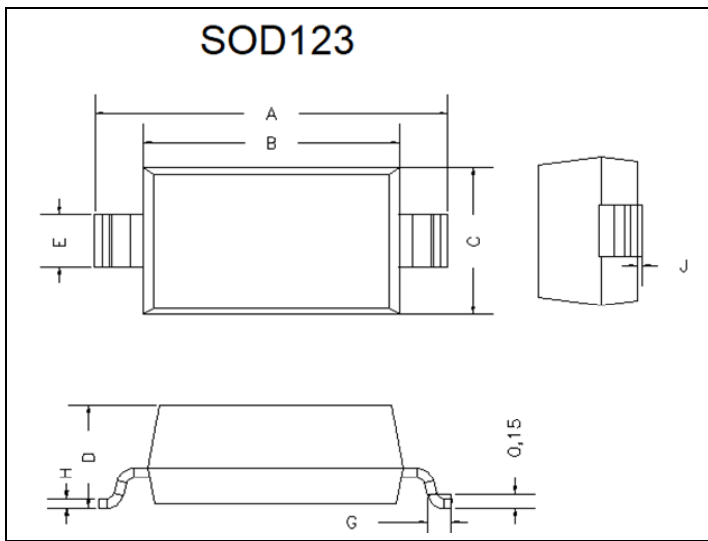
■ Characteristics (Typical)





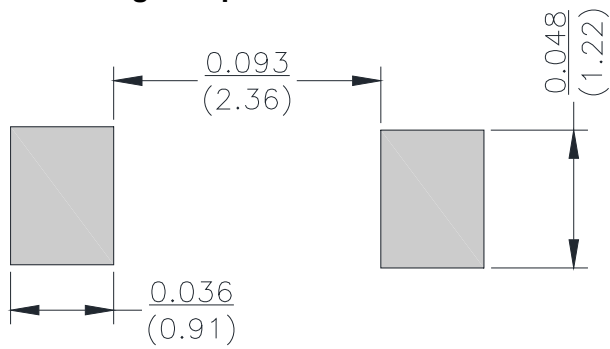
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■ Outline Dimensions



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



BAT46WQ

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