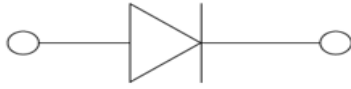


Small Signal Schottky Diode



SOD123

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- Low Turn-on Voltage
- V_R 30V
- I_{FAV} 0.2A
- Part no. with suffix "Q" means AEC-Q101 qualified

Mechanical Data

- **Case:** SOD123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** L9

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	V		30
Average forward current	I_{FAV}	mA		200
Peak forward surge current	I_{FSM}	A	8.3ms single half sine-wave	0.6
Power dissipation	P_D	mW		200
Thermal Resistance Junction to Ambient	R_{thJA}	$^\circ\text{C}/\text{W}$		625
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	Typ	Max
Forward Voltage	V_F	V	$I_F=0.1\text{mA}$			0.24
			$I_F=1\text{mA}$			0.32
			$I_F=10\text{mA}$			0.4
			$I_F=30\text{mA}$			0.5
			$I_F=100\text{mA}$			1.0
Reverse Current	I_R	μA	$V_R=25\text{V}$			2
Reverse Breakdown Voltage	V_{BR}	V	$I_R=100\mu\text{A}$	30		
Junction Capacitance	C_J	pF	$V_R=1\text{V}, f=1\text{MHz}$			10
Reverse Recovery Time	t_{rr}	ns	$I_F=I_R=10\text{mA}, I_{rr}=1\text{mA}$			5



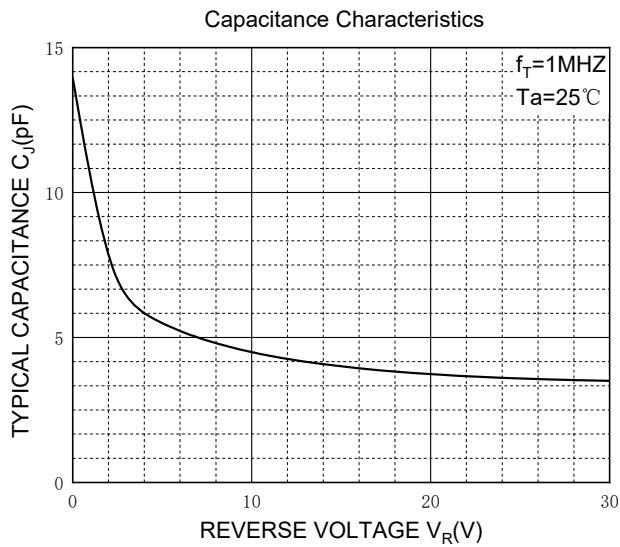
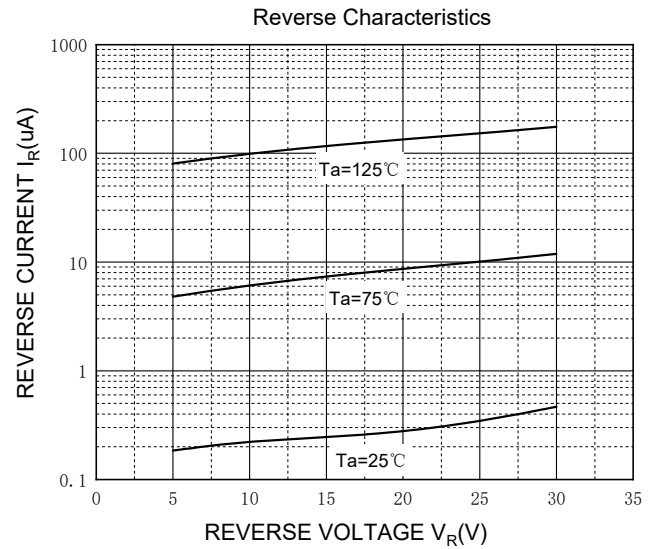
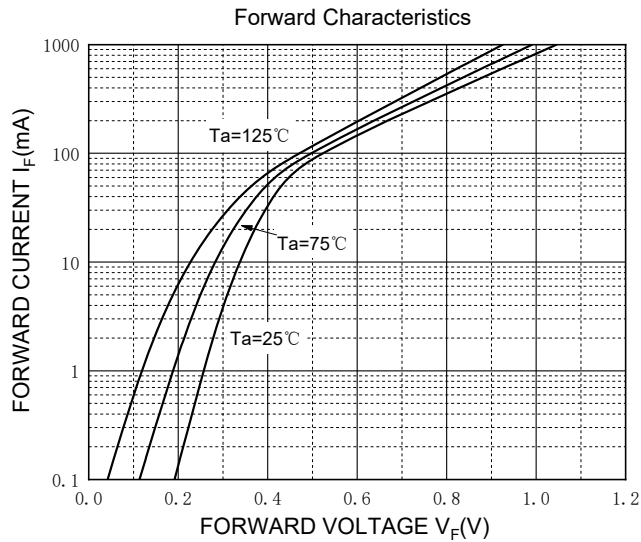
BAT54WQ

RoHS
COMPLIANT

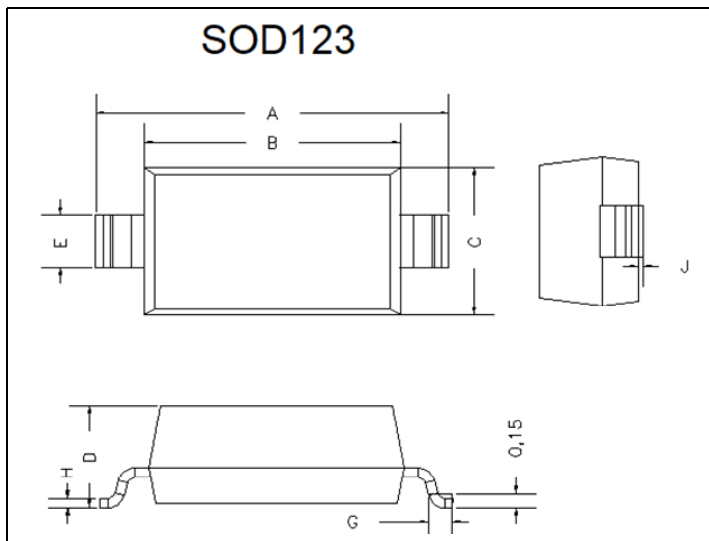
■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT54WQ	F2	Approximate 0.010	3000	30000	120000	7" reel

■ Characteristics (Typical)

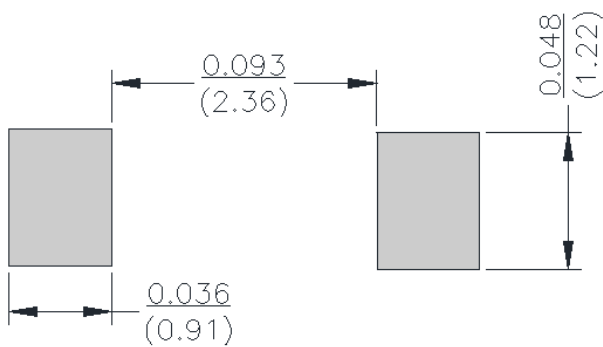


■ Outline Dimensions



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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