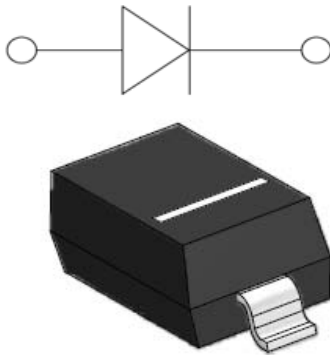


Small Signal Schottky Rectifier



SOD123

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_R 40V
- I_{FAV} 0.5A
- Part no. with suffix "Q" means AEC-Q101 qualified

Application

- For Surface Mount Application
- Automotive

Mechanical Data

- **Case:** SOD123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** R41

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	V		40
DC Blocking Voltage	V_R	V		40
Average Forward Current	I_{FAV}	A		0.5
Peak Forward Surge Current	I_{FSM}	A	8.3ms, half sine	5.5
Power Dissipation	P_{tot}	mW		410
Thermal Resistance Junction to Ambient	R_{thJA}	K/W		244
Maximum Junction Temperature	T_J	°C		-55 to +125
Storage Temperature Range	T_{stg}	°C		-55 to +150

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Breakdown Voltage	V_R	V	$I_R=20\mu A$	40		
Forward Voltage	V_F	V	$I_F=0.5A, T_A=25^\circ C$			0.51
			$I_F=1A, T_A=25^\circ C$			0.62
Reverse Leakage Current	I_R	μA	$V_R=20V$			10
			$V_R=40V$			20
Typical Junction Capacitance	C_J	pF	$V_R=4V, f=1MHz$			30

**■ Ordering Information (Example)**

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
B0540WQ	F2	Approximate 0.010	3000	30000	120000	7" reel

■ Characteristics(Typical)

Fig.1: Forward Characteristics

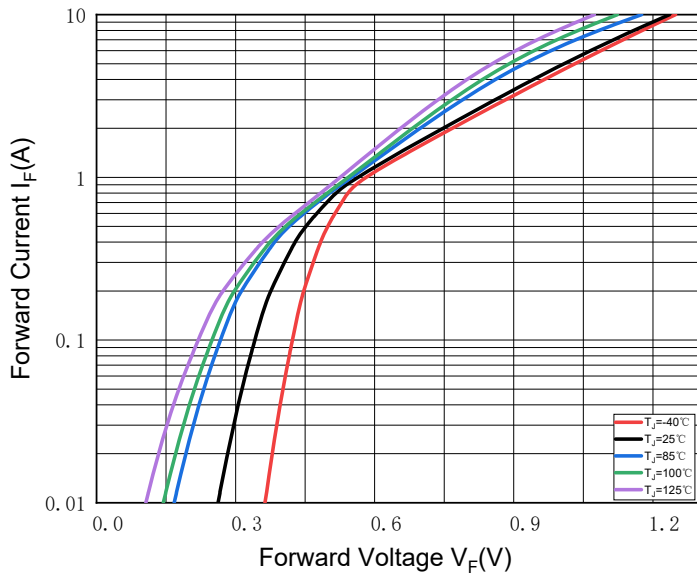


Fig.2: Reverse Characteristics

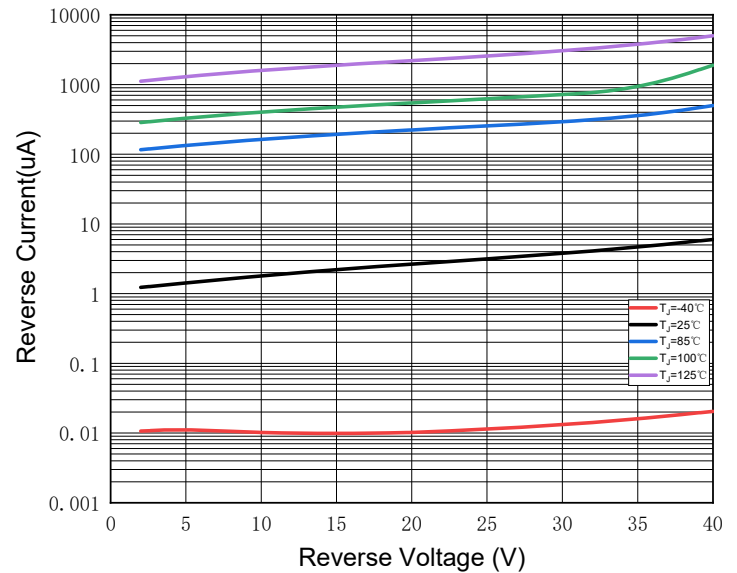
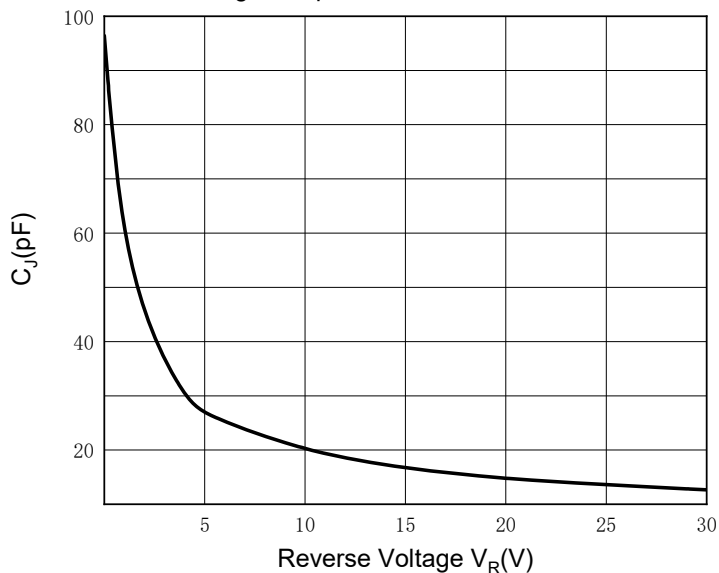
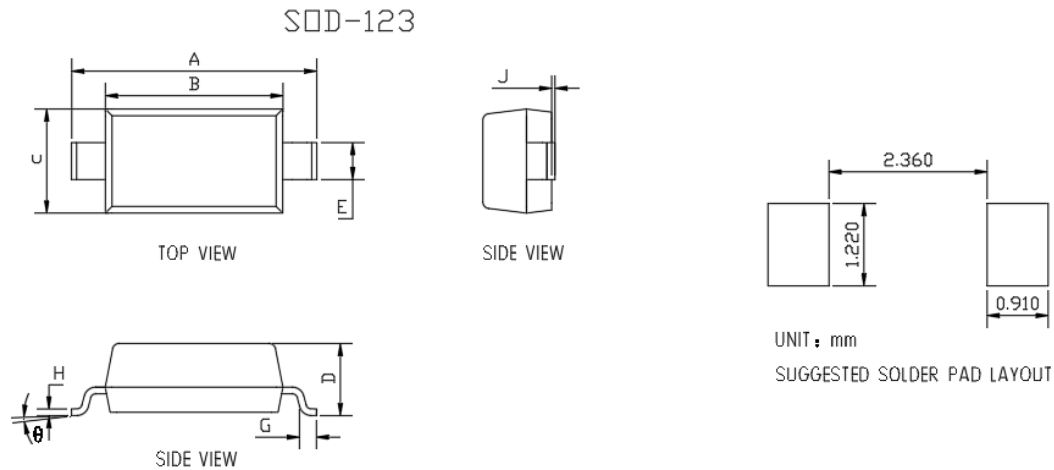


Fig.3: Capacitance Characteristics





■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.140	0.152	3.550	3.850
B	0.100	0.112	2.550	2.850
C	0.055	0.071	1.400	1.800
D	0.037	0.053	0.950	1.350
E	0.020	0.028	0.510	0.710
G	0.006	0.018	0.150	0.450
H	0.003	0.010	0.080	0.250
J	0.000	0.006	0.000	0.150
θ	0	8°	0	8°

■ Marking Information



Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. Body color: Black



Disclaimer

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