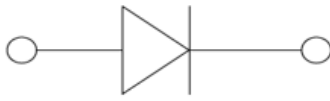


Small Signal Schottky Rectifier



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

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		310
Maximum Junction Temperature	T_j	°C		150
Storage Temperature Range	T_{stg}	°C		-55 to +150

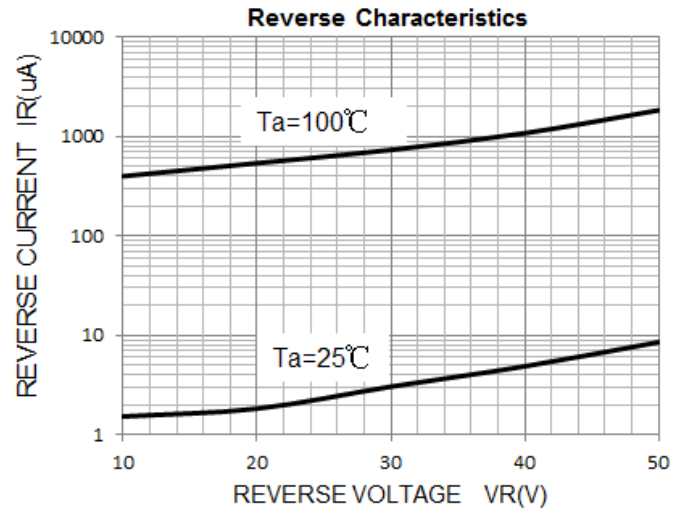
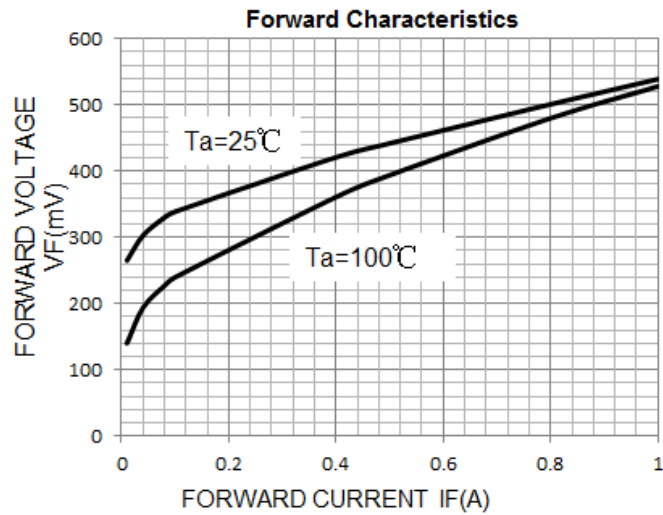
■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

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

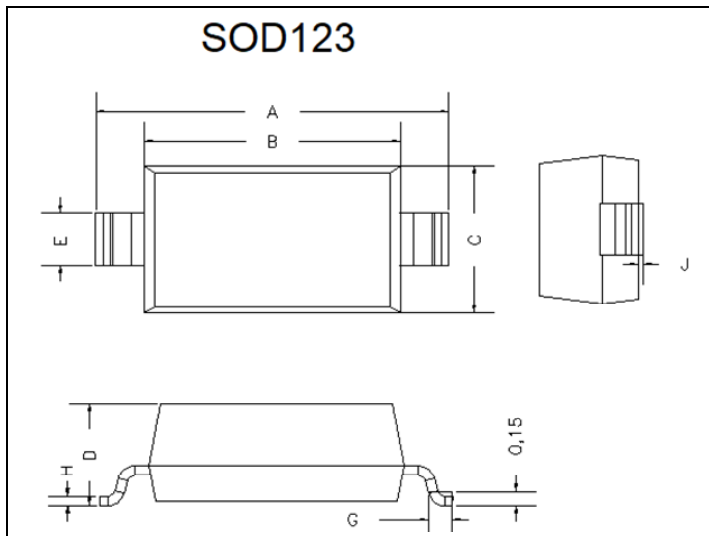
Ordering Information (Example)

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)

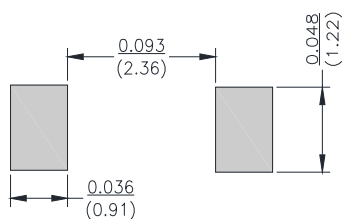


Outline Dimensions



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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