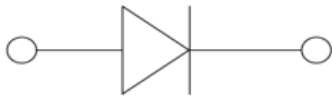


Small Signal Schottky Rectifier



SOD123

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_R 30V
- 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:** R31

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	V		30
DC Blocking Voltage	V_R	V		30
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		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	$I_R=100\mu A$	30		
Forward Voltage	V_F	V	$I_F=0.5A$,			0.55
Reverse Leakage Current	I_R	μA	$V_R=30V$			100
Typical Junction Capacitance	C_J	pF	$V_R=4V, f=1MHz$		40	

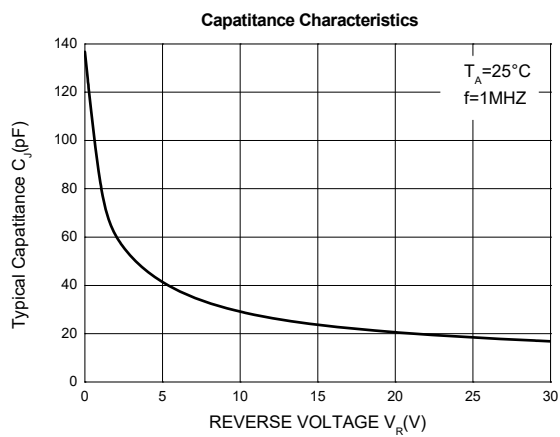
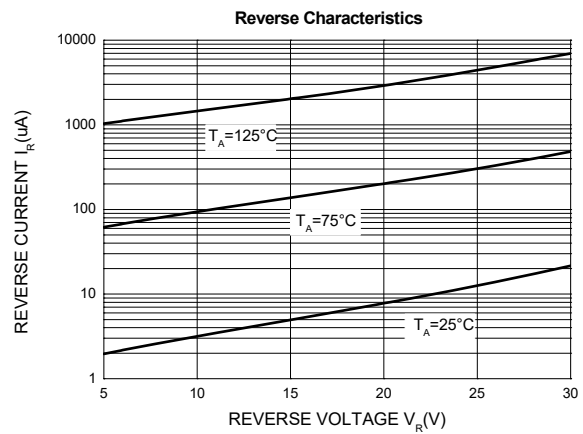
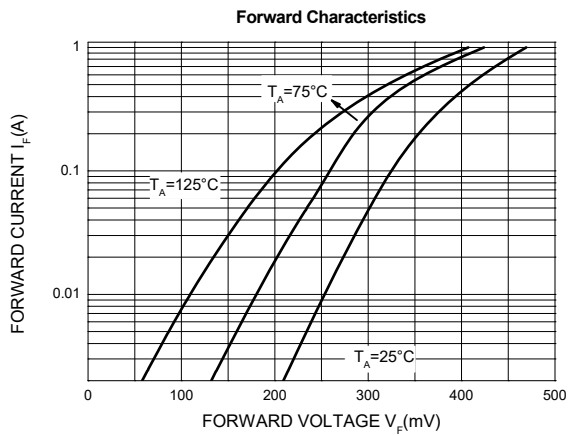


B0530WQ

■ Ordering Information (Example)

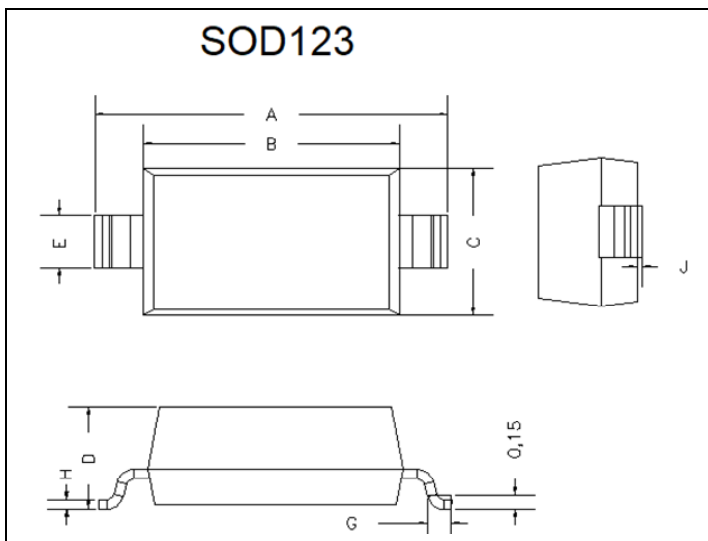
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
B0530WQ	F2	Approximate 0.010	3000	30000	120000	7" reel

■ Characteristics(Typical)



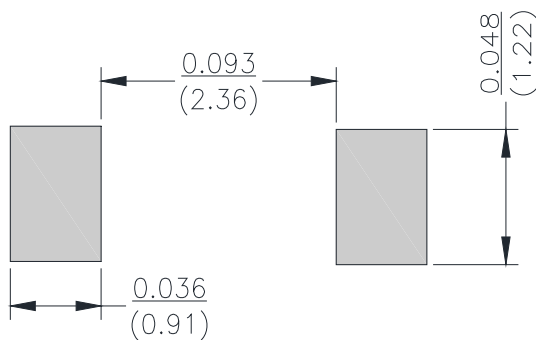


■ Outline Dimensions



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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