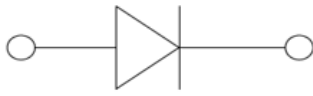


Small Signal Schottky Rectifier



Features

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

Mechanical Data

- **Case:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** 4

SOD323

■ Maximum Ratings ($T_a=25^\circ\text{C}$ 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
Voltage Rate of Change(Rate V_R)	dV/dt	V/us		1000
Power Dissipation	P_{tot}	mW		250
Thermal Resistance Junction to Ambient	R_{thJA}	$^\circ\text{C}/\text{W}$		500
Maximum Junction Temperature	T_J	$^\circ\text{C}$		-55 to +150
Storage Temperature Range	T_{stg}	$^\circ\text{C}$		-55to +150

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Breakdown Voltage	V_R	V	$I_R=20\mu\text{A}$	40		
Forward Voltage	V_F	V	$I_F=0.5\text{A}$, $T_A=25^\circ\text{C}$			0.55
Reverse Leakage Current	I_R	μA	$V_R=40\text{V}$			80
Typical Junction Capacitance	C_J	pF	$V_R=4\text{V}$, $f=1\text{MHz}$			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
B0540WSQ	F2	Approximate 0.004	3000	30000	120000	7" reel



■ Characteristics(Typical)

Fig.1: P_D-T_A

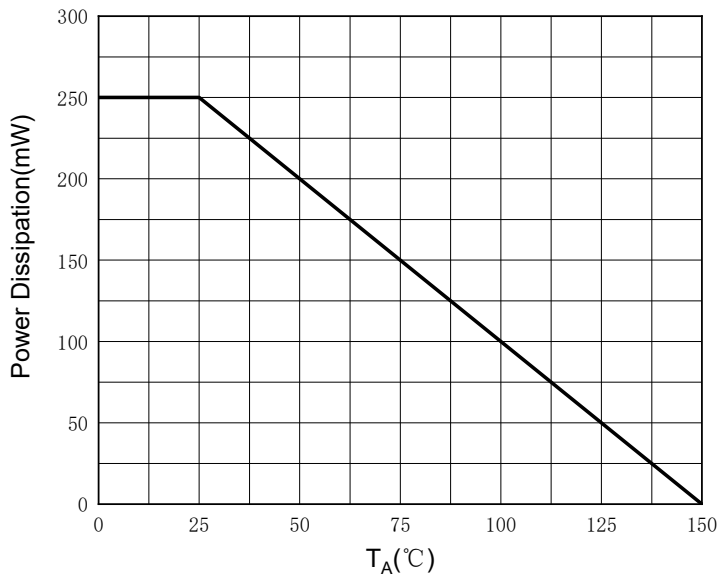


Fig.2: Forward Characteristics

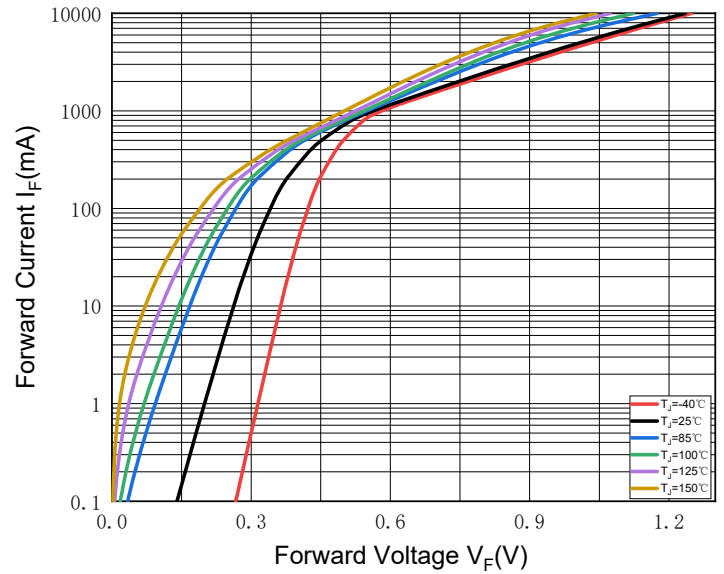


Fig.3: Reverse Characteristics

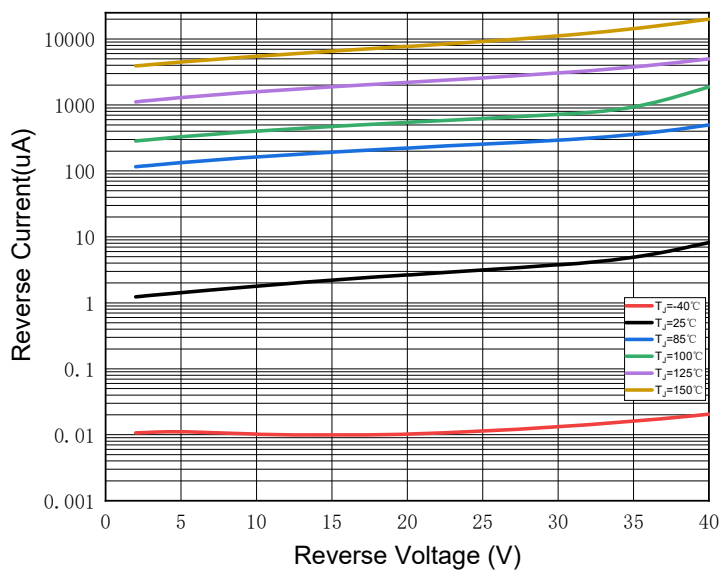
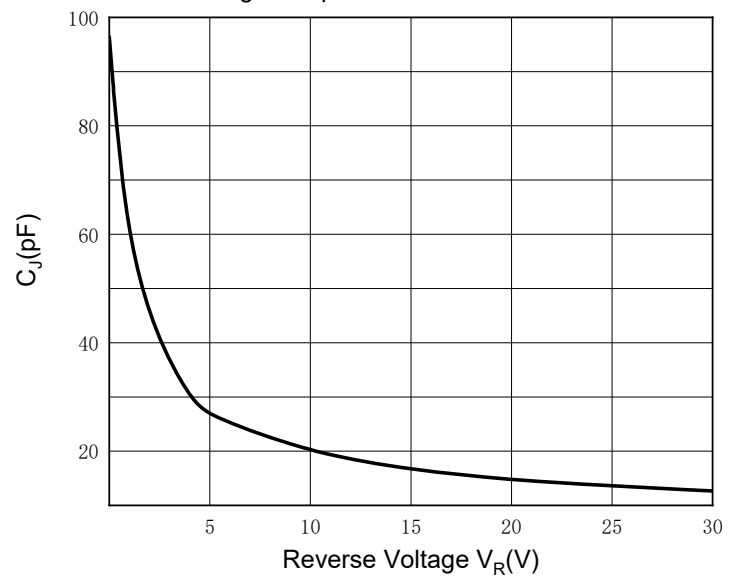
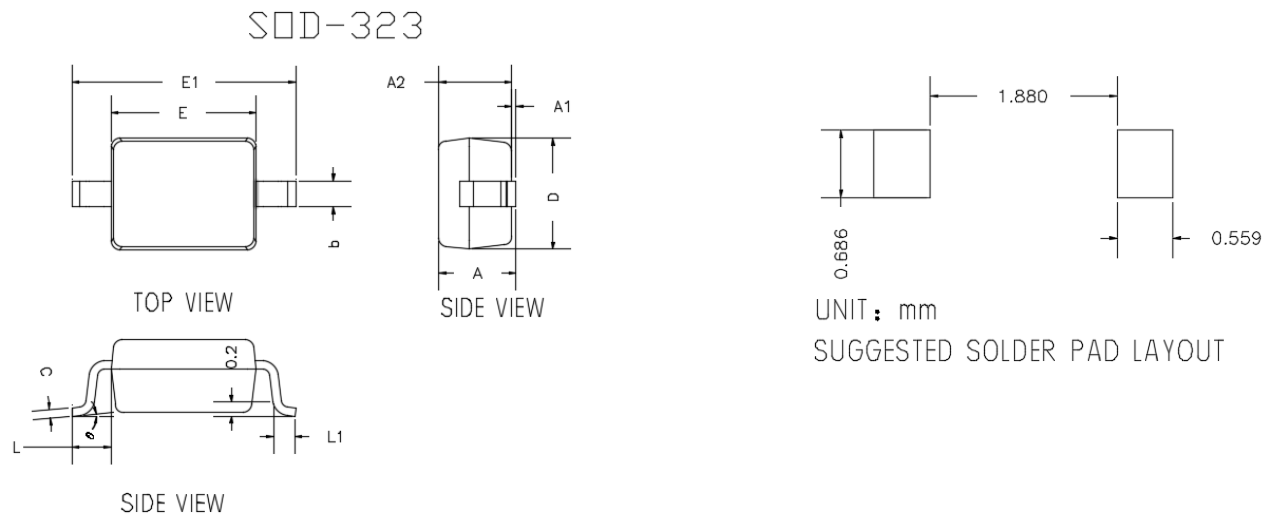


Fig.4: Capacitance Characteristics





■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN		MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
?	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



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