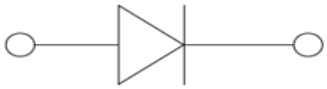
High Speed Switching Diode

SOD-323



Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- V_{BR} 100V
- I_{FAV} 200mA
- Part no. with suffix “Q” means AEC-Q101 qualified

Applications

- Low-Leakage
- Automotive

Mechanical Data

- **Case**: SOD-323
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Marking: D4

■ Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Reverse Breakdown Voltage	V_{BR}	V		100
Average Forward Current	I_{FAV}	mA		200
Non-Repetitive Peak Forward Surge Current	I_{FSM}	A	t_p=1 us	4
Power Dissipation	P_D	mW		250
Thermal Resistance Junction to Ambient	R_{thJA}	℃/W		500
Maximum Junction Temperature	T_j	℃		150
Storage Temperature Range	T_{stg}	℃		-55 to +150

■ Electrical Characteristics（Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN.	TPY.	MAX.
Forward Voltage	V_F	mV	I_F= 1mA			900
			I_F= 10mA			1000
			I_F= 50mA			1100
			I_F= 150mA			1250
Reverse Current	I_R	nA	V_R= 75V			5
Reverse Breakdown Voltage	V_{BR}	V	I_R= 100μA	100		
Junction Capacitance	C_j	pF	V_R= 0V, f= 1MH$_Z$			4
Reverse Recovery Time	t_{rr}	μs	I_F= I_R= 10mA, I_{rr}= 0.1I_R, R_L= 100Ω			3

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS416Q	F2	Approximate 0.0045	3000	30000	120000	7" reel

■ Characteristics (Typical)

Fig.1: P_D-T_A

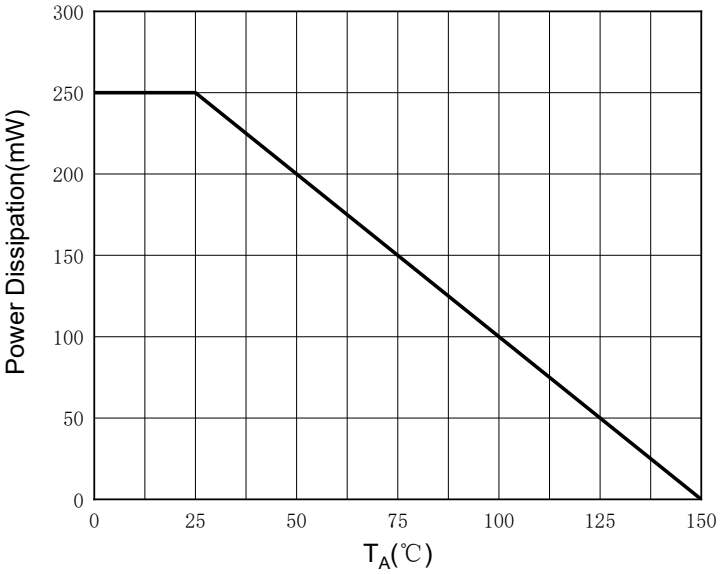


Fig.2: Forward Characteristics

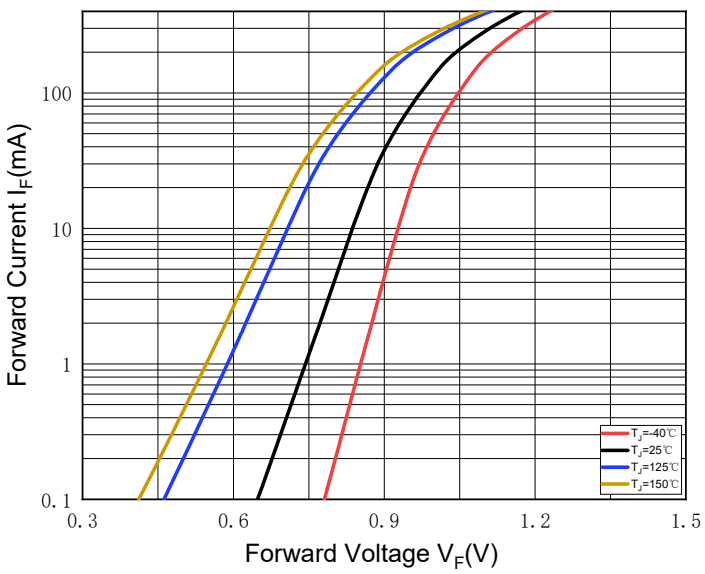


Fig.3: Reverse Characteristics

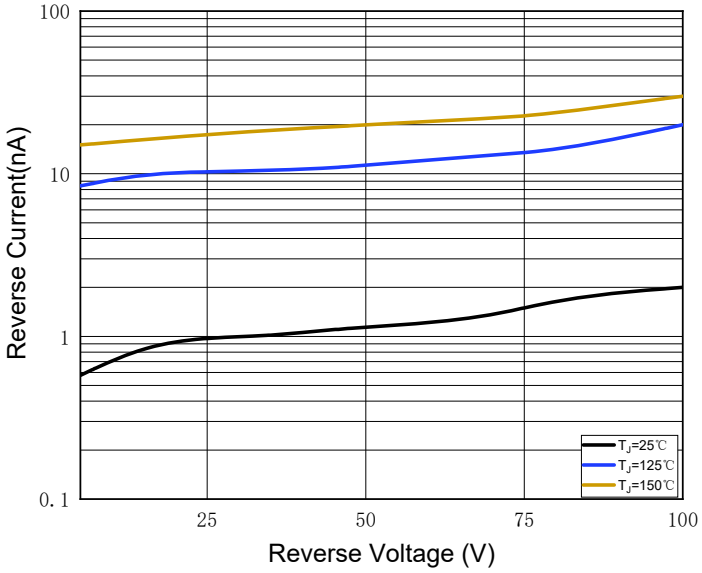
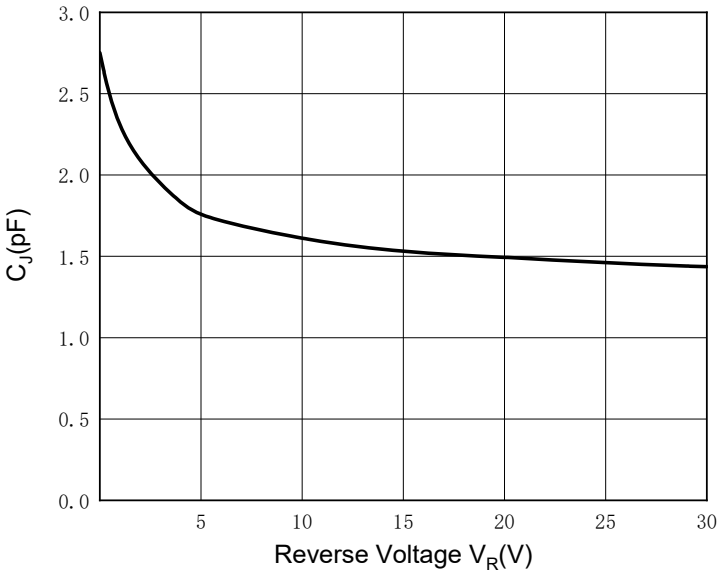
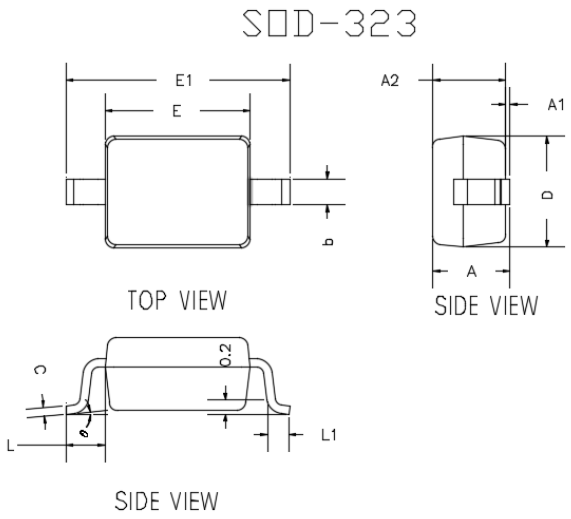
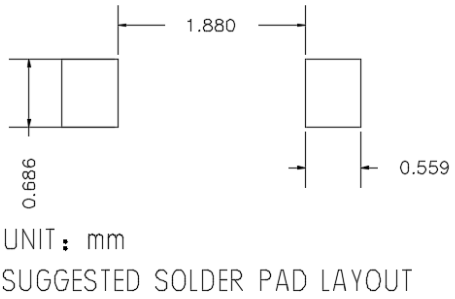


Fig.4: Capacitance Characteristics



■ Outline Dimensions





DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MN	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
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

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