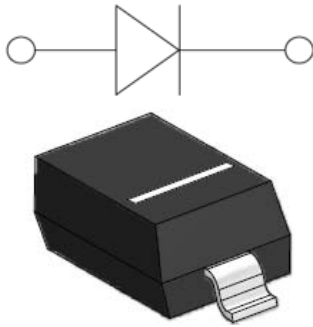


High Speed Switching Diode



SOD323

Features

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

Applications

- Extreme fast switches
- Automotive

Mechanical Data

- **Case:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** T4

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Repetitive Peak Reverse Voltage	V_{RRM}	V		100
Average Forward Current	I_{FAV}	mA		200
Peak Forward Surge Current	I_{FSM}	A	$t_p=1\text{ms}$	1
Power Dissipation	P_{tot}	mW		200
Thermal Resistance Junction To Ambient air	R_{thJA}	K/W		625
Maximum Junction Temperature	T_j	$^\circ\text{C}$		-55 to +150
Storage Temperature Range	T_{stg}	$^\circ\text{C}$		-55 to +150

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	MAX
Forward Voltage	V_F	V	$I_F=1\text{mA}$		0.715
			$I_F=10\text{mA}$		0.855
			$I_F=50\text{mA}$		1.0
			$I_F=150\text{mA}$		1.25
Reverse Current	I_R	μA	$V_R=75\text{V}$		1.0
Reverse Breakdown Voltage	V_{BR}	V	$I_R=100\mu\text{A}$	100	
Diode Capacitance	C_D	pF	$V_R=V_F=0\text{V}$, $f=1\text{MHz}$		4
Reverse Recovery Time	t_{rr}	ns	$I_F=I_R=10\text{mA}$, $I_{rr}=0.1I_R$, $R_L=100\Omega$		6



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■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS16WSQ	F2	Approximate 0.0045	3000	30000	120000	7" reel

■ Characteristics (Typical)

Fig.1: P_D-T_A

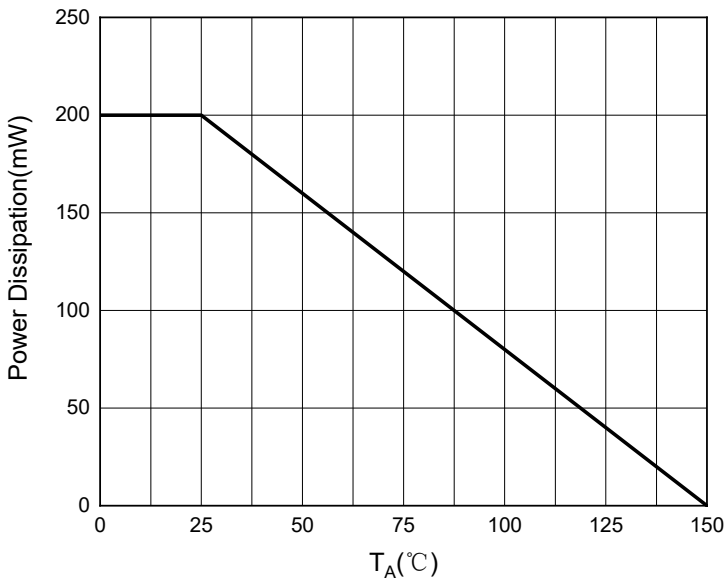


Fig.2: Capacitance Characteristics

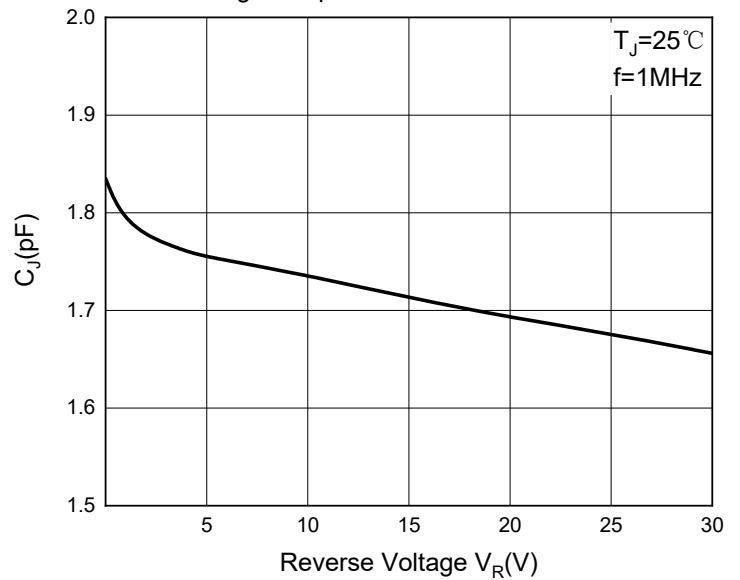


Fig3: Forward Characteristics

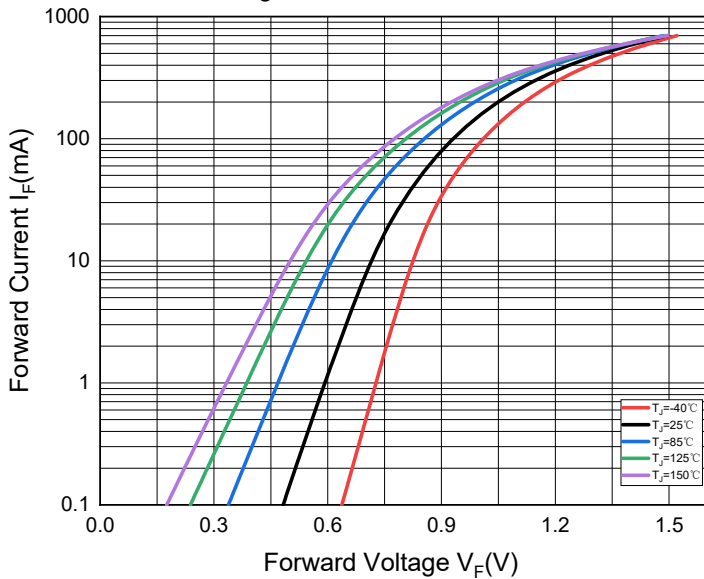
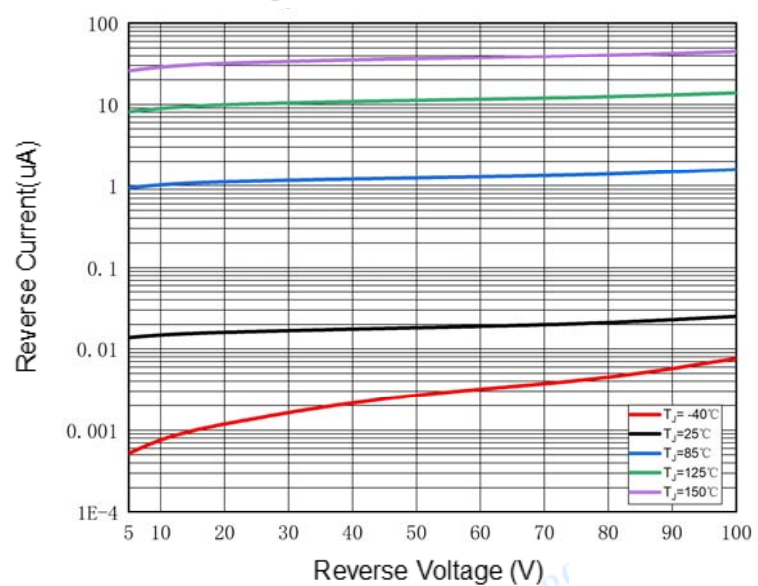


Fig.4: Reverse Characteristics

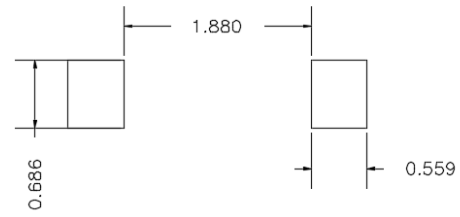
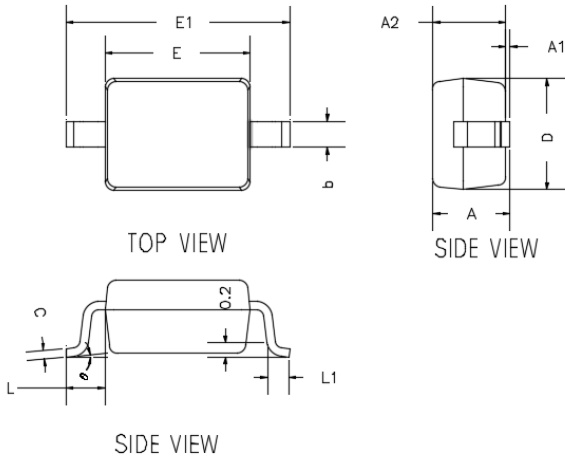




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■ Outline Dimensions

SOD-323

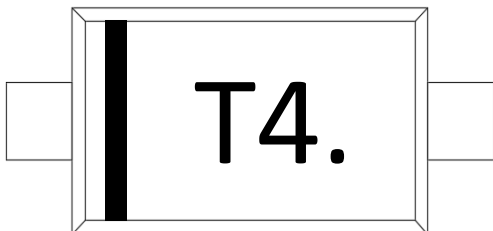


UNIT : mm

SUGGESTED SOLDER PAD LAYOUT

DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	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
e	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



BAS16WSQ

Disclaimer

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