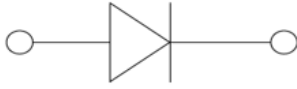


Small Signal Schottky Diode



SOD323

Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- Low Forward Voltage Schottky Rectifier
- V_{RRM} 70V
- I_{FAV} 70mA
- Part no. with suffix "Q" means AEC-Q101 qualified

Applications

- For Transient and ESD Protection
- Automotive

Mechanical Data

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

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Repetitive Peak Reverse Voltage	V_{RRM}	V		70
Average Forward Current	I_{FAV}	mA		70
Peak Forward Surge Current	I_{FSM}	A	$t=8.3\text{ms}$	3
Power Dissipation	P_{tot}	mW		250
Thermal Resistance Junction to Ambient	R_{thJA}	K/W		500
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	$I_F=1\text{mA}$		0.41
			$I_F=15\text{mA}$		1
Reverse Current	I_R	μA	$V_R=50\text{V}$		0.2
Breakdown Voltage	V_{BR}	V	$I_R=10\mu\text{A}$	70	
Junction Capacitance	C_J	pF	$V_R=0\text{ V, } f=1\text{MHZ}$		4
Reverse Recovery Time	t_{rr}	ns	$I_F=I_R=10\text{mA, } I_{rr}=1\text{mA, } R_L=100\Omega$		5



BAS70WSHQ

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS70WSHQ	F2	Approximate 0.0048	3000	30000	120000	7" reel

■ Characteristics (Typical)

Fig.1: $P_D - T_A$

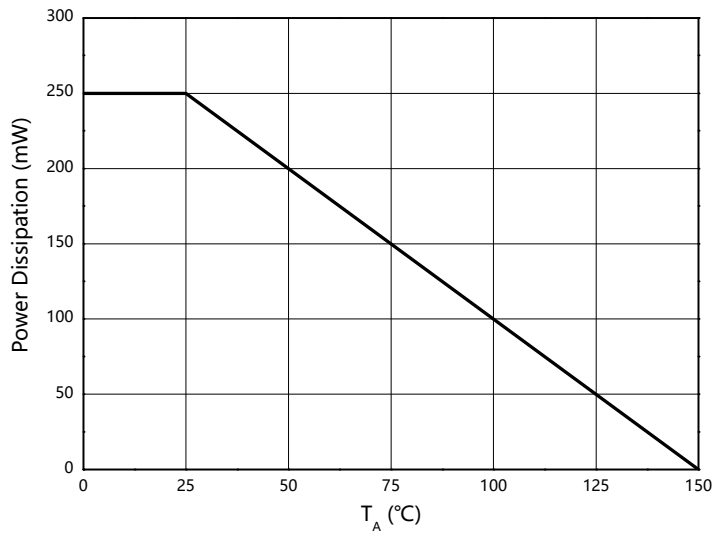


Fig.2: Capacitance Characteristics

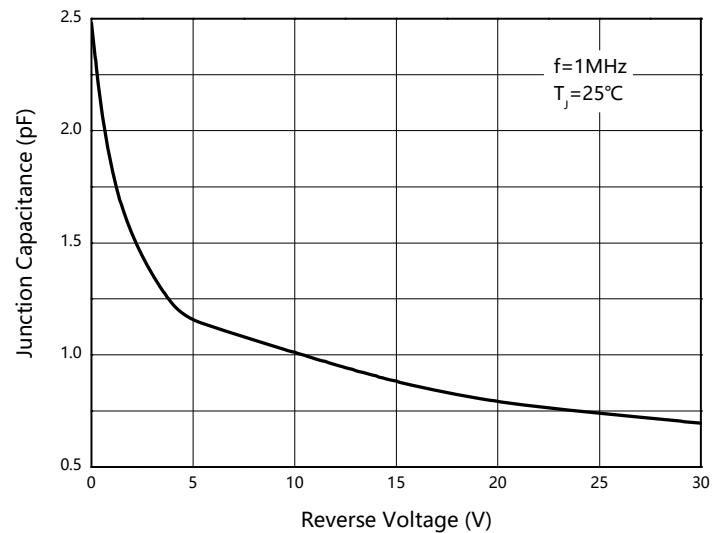


Fig.3: Forward Characteristics

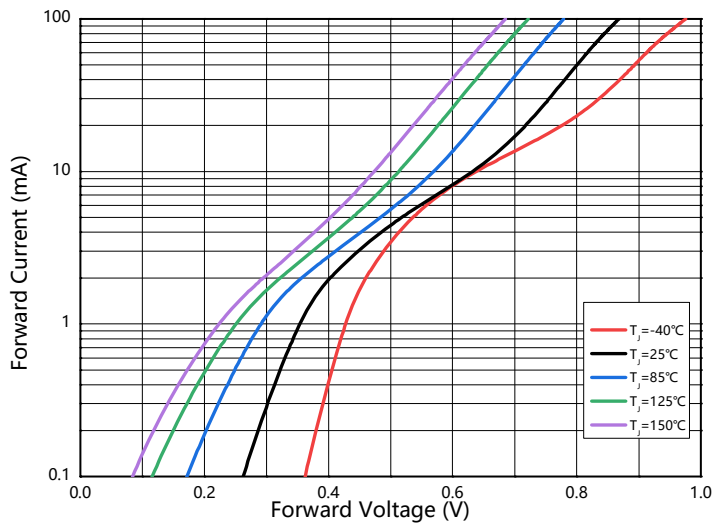
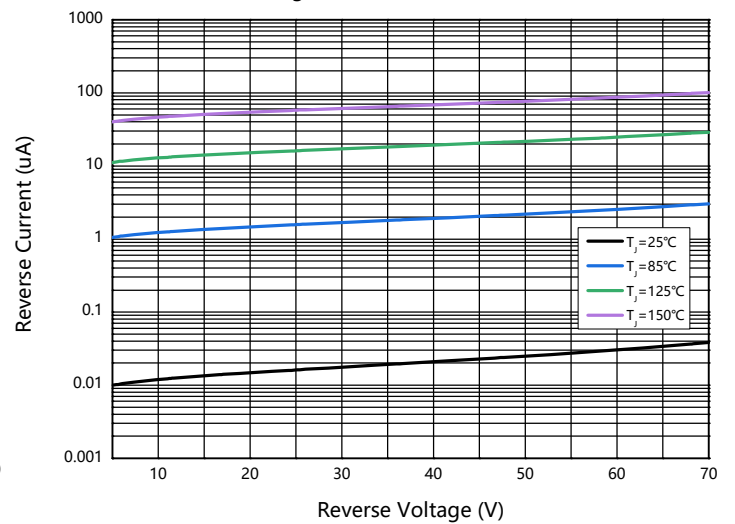


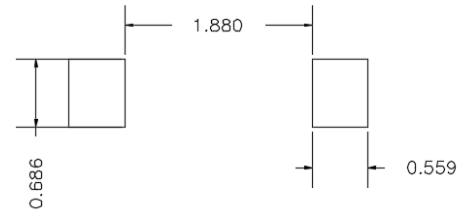
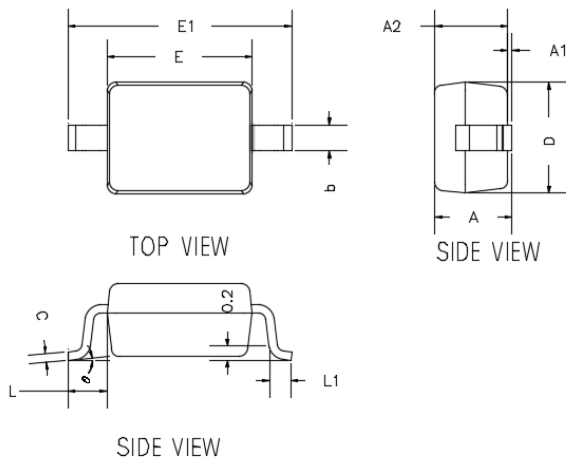
Fig.4: Reverse Characteristics





■ 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
θ	0°	8°	0°	8°

NOTE:

1. PACKAGE BODY SIZES EXCLUDE MOLD FLASH AND GATE BURRS.
2. TOLERANCE 0.1mm UNLESS OTHERWISE SPECIFIED.
3. THE PAD LAYOUT IS FOR REFERENCE PURPOSES ONLY.

■ Marking Information



Note:

1. All marking is at middle of the product body
2. All marking is in laser marking
3. Body color: Black
4. % is a date code, rotated 90° counterclockwise

Date Code vary depending upon production date



Disclaimer

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