

Silicon Epitaxial Planar Switching Diode

Features

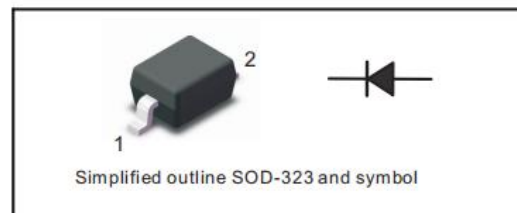
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

Mechanical data

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	BAS316	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	75	V
Continuous Forward Current	I_F	300	mA
Non-reptitive Peak Forward Surge Current at 1ms	I_{FSM}	4	A
Total Power Dissipation	P_{tot}	400	mW
Operating and Storage Temperature Range	T_I, T_{STG}	-55~150	$^{\circ}\text{C}$

Characteristics ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	BAS316	Unit
Reverse Breakdown Voltage at $I_R = 1\mu\text{A}$	$V_{(BR)R}$	75	V
Maximum Forward Voltage at 150 m A	V_F	1.25	V
Peak Reverse Current	$V_R = 75\text{ V}, T_J=25^{\circ}\text{C}$	1	μA
	$V_R = 75\text{ V}, T_J=150^{\circ}\text{C}$	50	μA
Typical Junction Capacitance	C_J	5	pF
Maximum Reverse Recovery Time ⁽¹⁾ (Typical)	t_{rr}	6	ns

1) Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$

Typical Characteristics

Fig.1 Forward Current Derating Curve

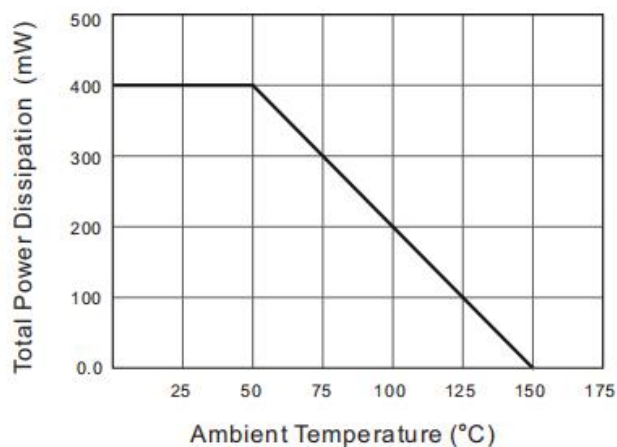


Fig.2 Typical Reverse Characteristics

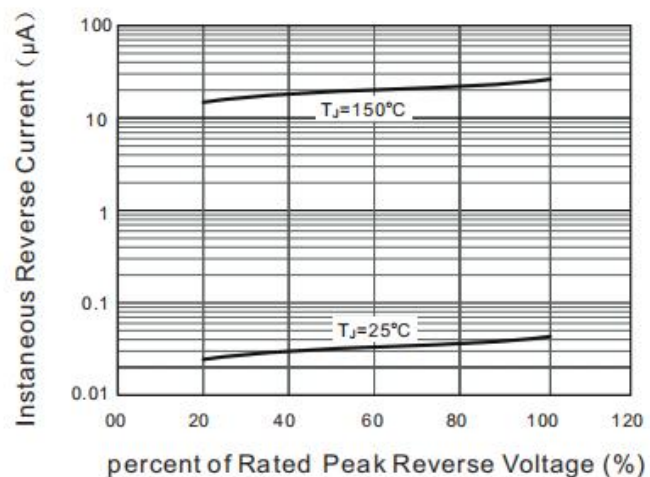


Fig.3 Typical Instantaneous Forward Characteristics

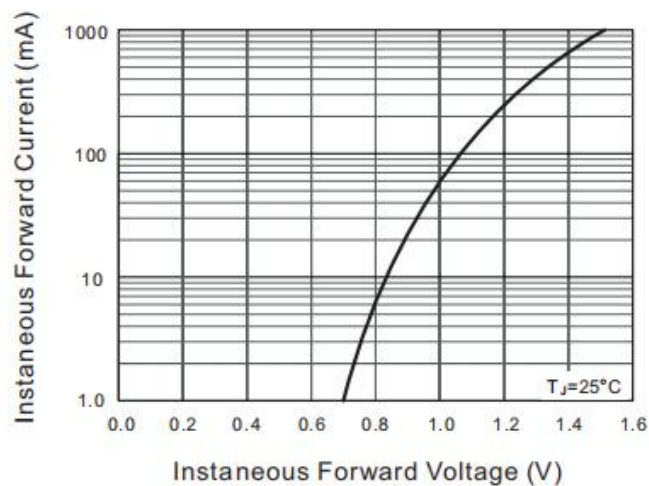
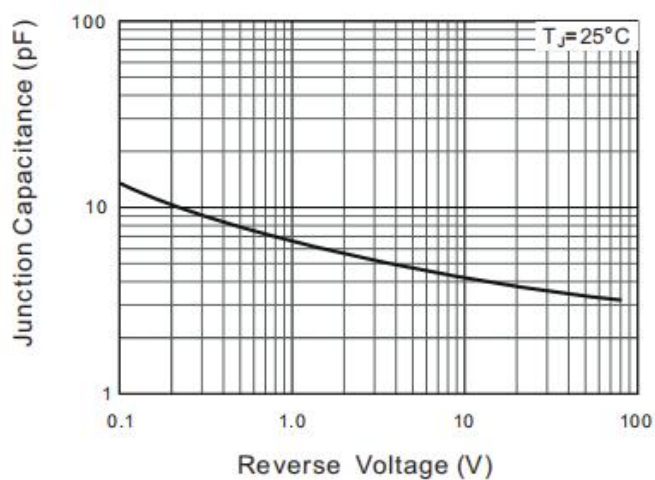


Fig.4 Typical Junction Capacitance



Package Information

SOD-323

Dimensions in mm

