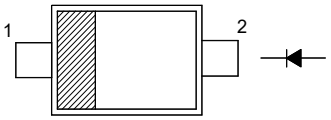
Silicon Epitaxial Planar Diode

High Voltage Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SOD-323 and symbol

Features

- AEC-Q101 Qualified
- Small surface mounting type
- High speed
- Suitable for high packing density
- High voltage capability
- Halogen and Antimony Free(HAF), RoHS compliant

Application

- Ultra high speed switching

Absolute Maximum Ratings (T_a = 25℃ unless otherwise specified)

Parameter		Symbol	Value	Unit
Peak Reverse Voltage		V_{RM}	350	V
Average Rectified Forward Current, tp < 5 ms		$I_{F(AV)}$	225	mA
Peak Forward Surge Current	tp = 1 μs tp = 1 s	I_{FSM}	4 1	A
Power Dissipation [1]		P_D	200	mW
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	- 55 to + 150	℃

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance - Junction to Ambient [1]	$R_{\theta JA}$	625	℃/W

[1] Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

Characteristics at T_a = 25℃ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at I_R = 150 μA	$V_{(BR)R}$	350	-	-	V
Forward Voltage at I_F = 100 mA	V_F	-	-	1	V
Reverse Current at V_R = 240 V	I_R	-	-	100	nA
Junction Capacitance at V_R = 0 V, f = 1 MHz	C_j	-	-	5	pF
Reverse Recovery Time at I_F = I_R = 30 mA, I_{rr} = 3 mA, R_L = 100 Ω	t_{rr}	-	75	-	ns

Electrical Characteristics Curves

Fig. 1 Power Derating Curve

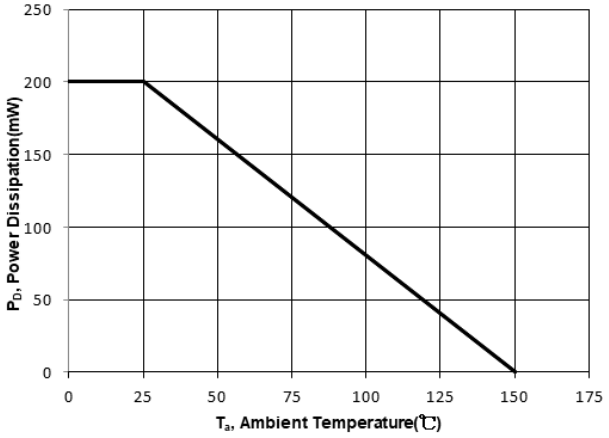


Fig. 2 Capacitance Characteristics

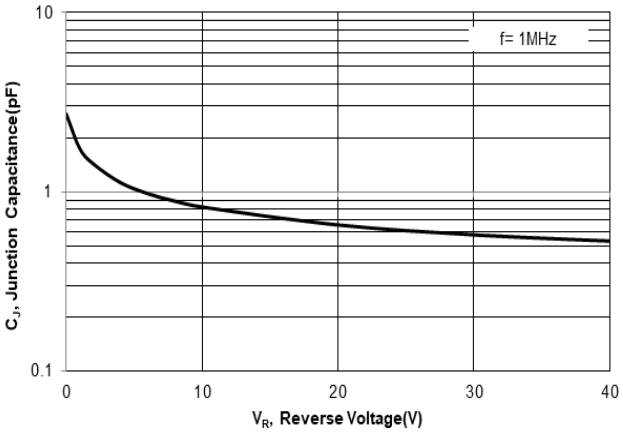


Fig. 3 Reverse Characteristics

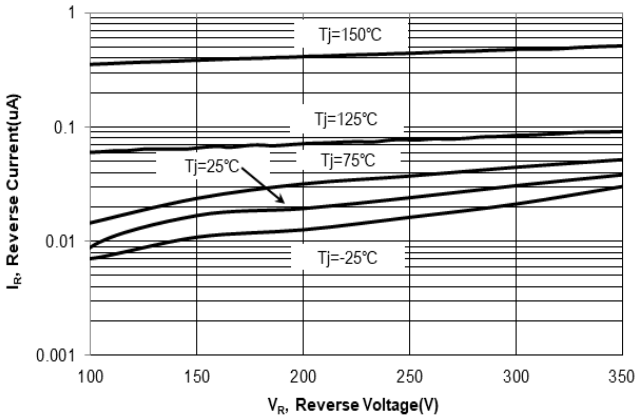
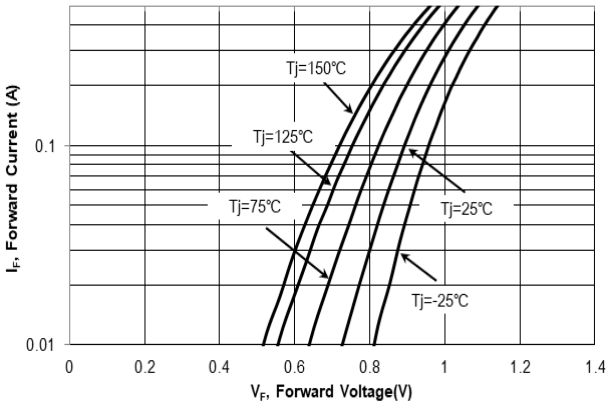
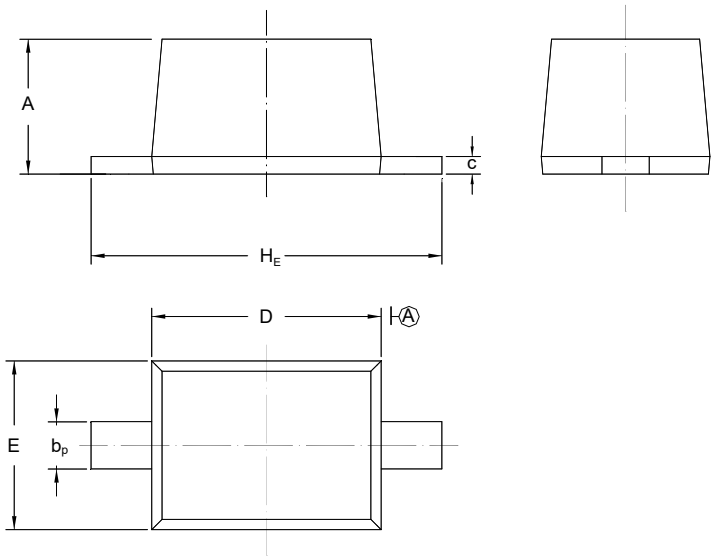


Fig. 4 Forward Characteristics



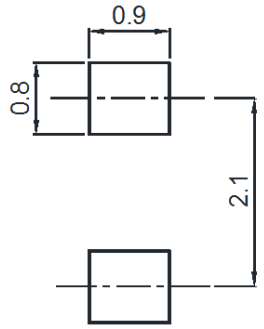
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads SOD-323



UNIT	A	b_p	C	D	E	H_E
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30

Recommended Soldering Footprint

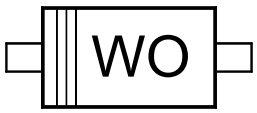


Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-323	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" WO " = Part No.
" III " = Cathode line
Font type: Arial



Disclaimer: Our company reserve the right to make modifications, enhancements, improvements, corrections or other changes to improve product design, functions and reliability, anytime without notice. Semtech Electronics Limited makes no warranties, representations or warranties regarding the suitability of its products for any particular purpose, and does not accept any liability arising from the application or use of any product or circuit such as: Apply to medical, military, aircraft, space or life support equipment and expressly waive any and all liability, including but not limited to special, consequential or collateral damage.