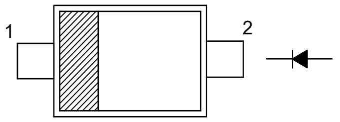
1SS355-AH

Silicon Epitaxial Planar Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SOD-323 and symbol

Features

- Small plastic package suitable for surface mounted design
- High reliability with high surge current handling capability
- AEC-Q101 Qualified
- Halogen and Antimony Free(HAF), RoHS compliant

Applications

- High speed switching

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	90	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Current	I_{FM}	225	mA
Surge Forward Current (1 s)	I_{FSM}	500	mA
Power Dissipation	P_D	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient 1)	$R_{θJA}$	625	℃/W

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

Electrical Characteristics (T_a = 25 °C)

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 µA	$V_{(BR)R}$	80	-	V
Forward Voltage at I_F = 100 mA	V_F	-	1.2	V
Reverse Current at V_R = 80 V	I_R	-	0.1	µA
Capacitance between Terminals at V_R = 0.5 V, f = 1 MHz	C_T	-	3	pF
Reverse Recovery Time at I_F = 10 mA, I_{rr} = 0.1 X I_R , V_R = 6 V, R_L = 100 Ω	t_{rr}	-	4	ns

Electrical Characteristics Curves

Fig 1. Power Derating Curve

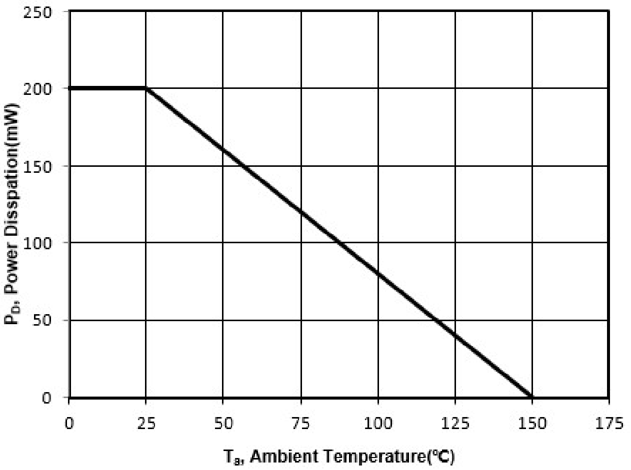


Fig 2. Total Capacitance vs. Reverse Voltage

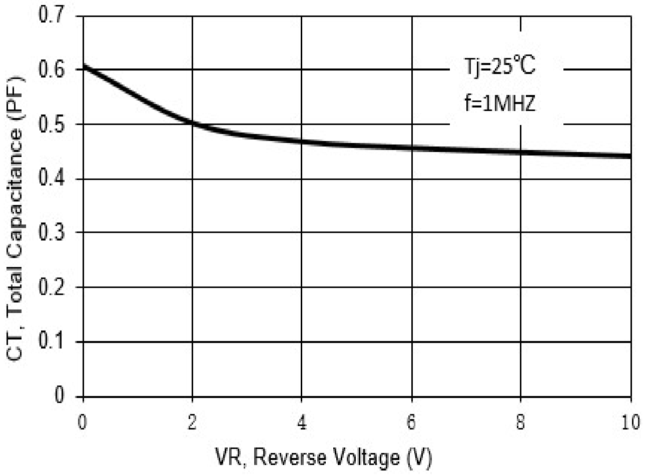


Fig 3. Reverse Current vs. Reverse Voltage

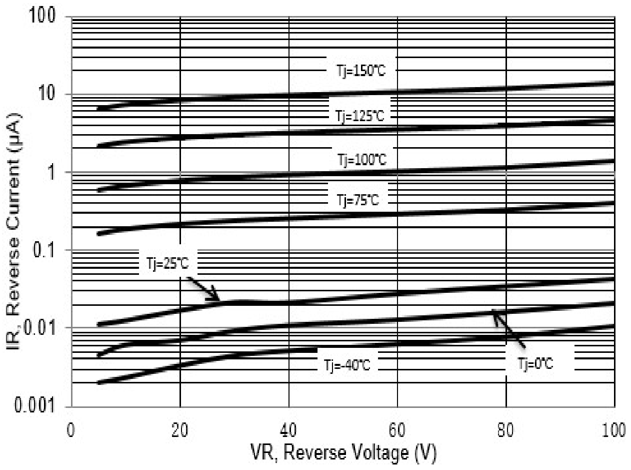
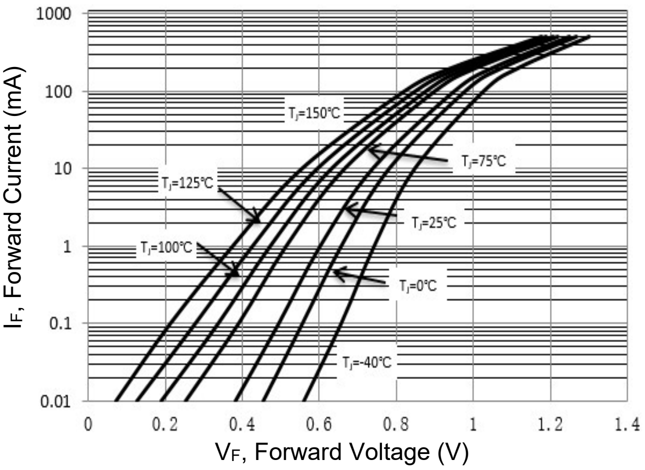


Fig 4. Forward Characteristics



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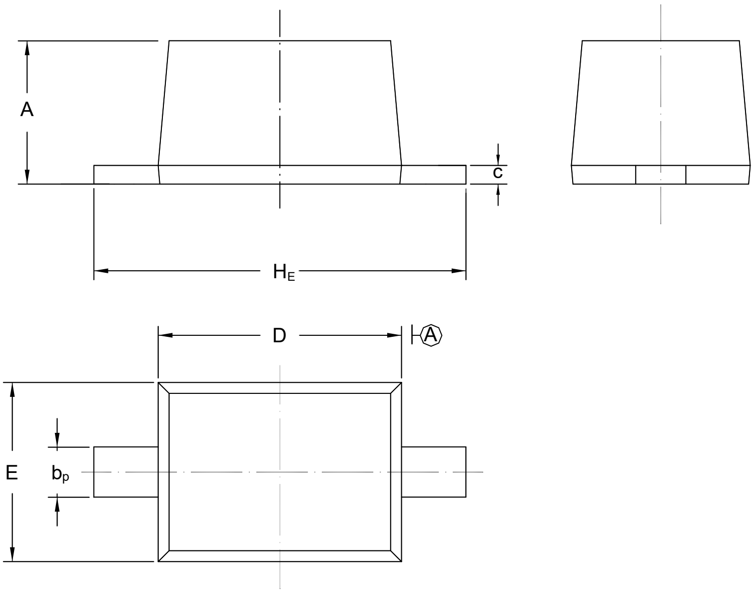
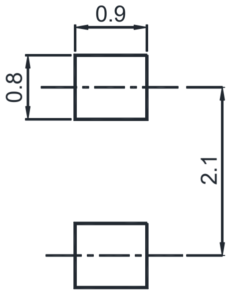
PACKAGE OUTLINE

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

" W2 " = Part No.
" III " = Cathode line
" • " = HAF (Halogen and Antimony Free)
Font type: Arial