A1SS357

Silicon Epitaxial Schottky Barrier Diode

Features

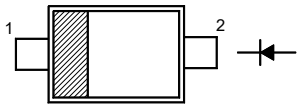
- AEC-Q101 Qualified
- Low forward voltage
- Low reverse current
- Halogen and Antimony Free(HAF), RoHS compliant

Applications

- High Speed Switching

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SOD-323 and symbol

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	45	V
Reverse Voltage	V_R	40	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Current	I_{FM}	300	mA
Surge Forward Current (10 ms)	I_{FSM}	1	A
Power Dissipation	P_D	200	mW
Junction Temperature	T_j	125	℃
Storage Temperature Range	T_{stg}	- 55 to + 125	℃

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient [1)]	$R_{\theta JA}$	500	℃/W

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

Characteristics at T_a = 25℃

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 150 μA	$V_{(BR)R}$	40	-	V
Forward Voltage at I_F = 100 mA	V_F	-	0.6	V
Reverse Current at V_R = 40 V	I_R	-	5	μA
Total Capacitance at V_R = 0, f = 1 MHz	C_T	-	25	pF

Electrical Characteristic Curves

Fig 1. Reverse Characteristic Curve

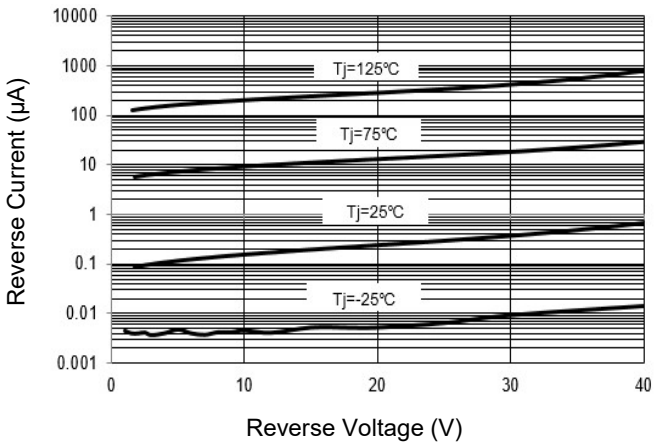


Fig 2. Forward Characteristic Curve

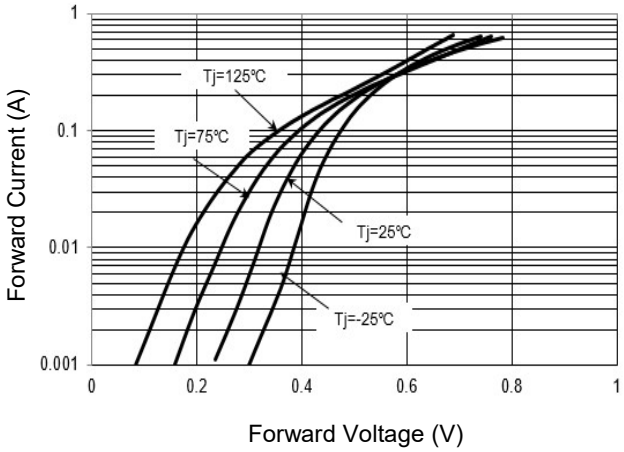


Fig 3. Junction Capacitance

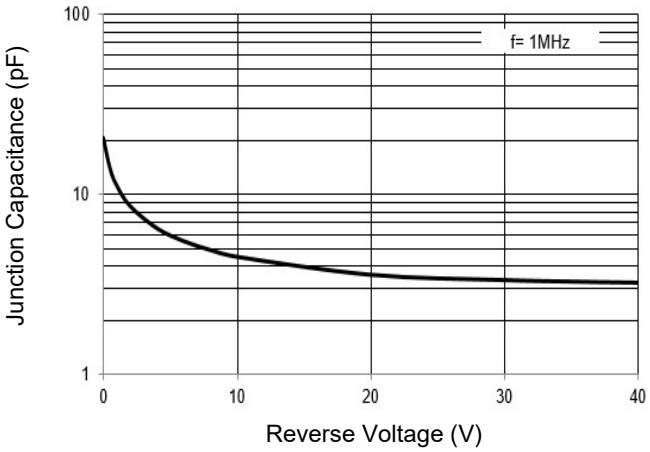
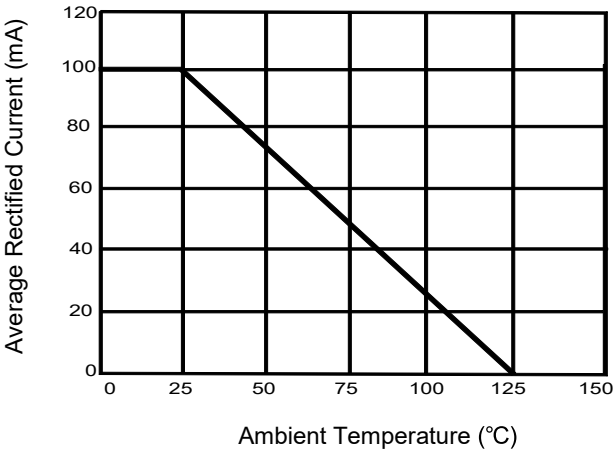
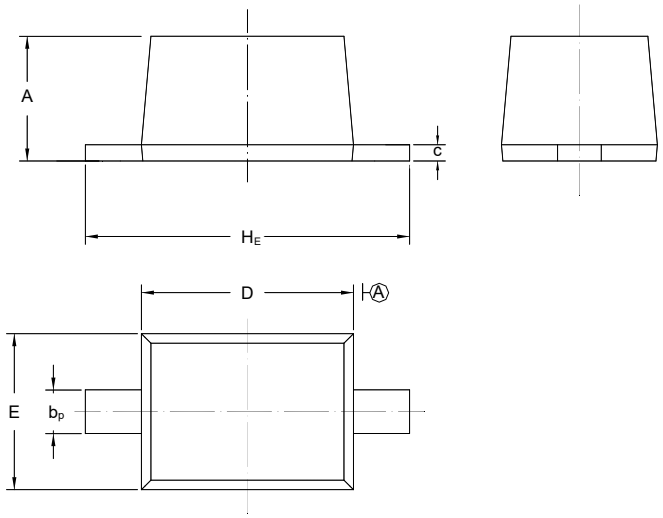


Fig 4. Average Rectified Current Derating Curve



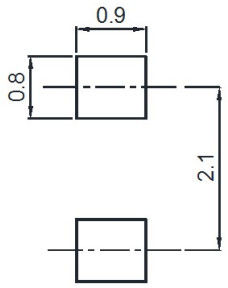
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PACKAGE OUTLINE
Plastic surface mounted package; 2 leads **SOD-323**



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

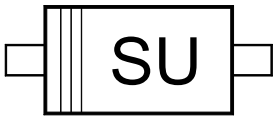


Packing information

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

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



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