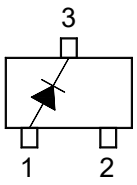
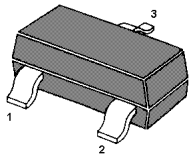
ABAS25

High Voltage Silicon Epitaxial Planar Switching Diodes

Features

- AEC-Q101 Qualified
- Halogen and Antimony Free(HAF), RoHS compliant





1. Andoe 2. NC 3. Cathode
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25℃)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	250	V
Continuous Forward Current	$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current at t = 1 s at t = 1 μs	I_{FSM}	0.5 2.5	A
Power Dissipation [1)]	P_D	350	mW
Operating Junction Temperature Range	T_j	- 55 to + 150	℃
Storage Temperature Range	T_{stg}	- 55 to + 150	℃

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient [1)]	$R_{\theta JA}$	357	℃/W

[1)] Device mounted on FR-4 PCB with minimum recommended pad layout.

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Characteristics at T_a = 25℃

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 µA	$V_{(BR)}$	250	-	V
Forward Voltage at I_F = 100 mA at I_F = 200 mA	V_F	- -	1 1.25	V V
Reverse Current at V_R = 200 V at V_R = 200 V, T_j = 150 °C	I_R	- -	0.1 100	µA µA
Total Capacitance at V_R = 0, f = 1 MHz	C_{tot}	-	5	pF
Reverse Recovery Time at I_F = I_R = 30 mA, I_{rr} = 0.1 X I_R, R_L = 100 Ω	t_{rr}	-	50	ns

Electrical Characteristic Curve

Fig 1. Power Derating Curve

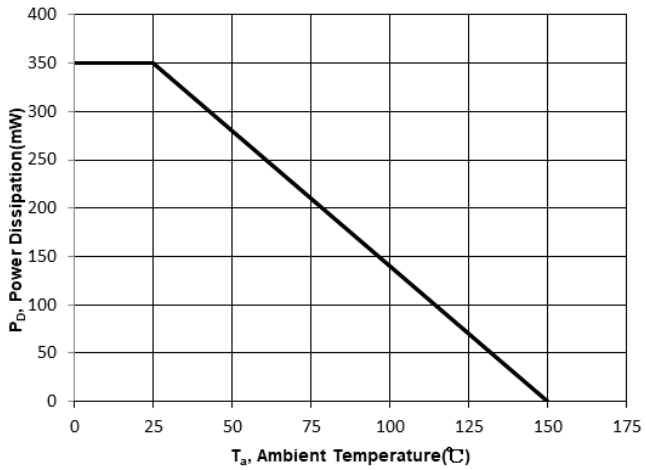


Fig 2. Forward Characteristic Curve

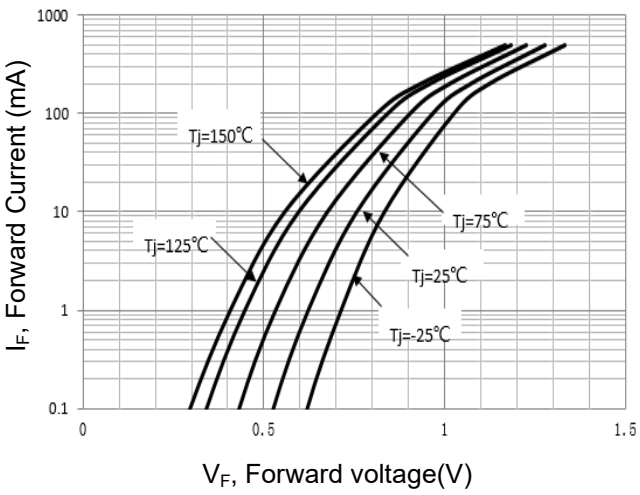


Fig 3. Total Capacitance Curve

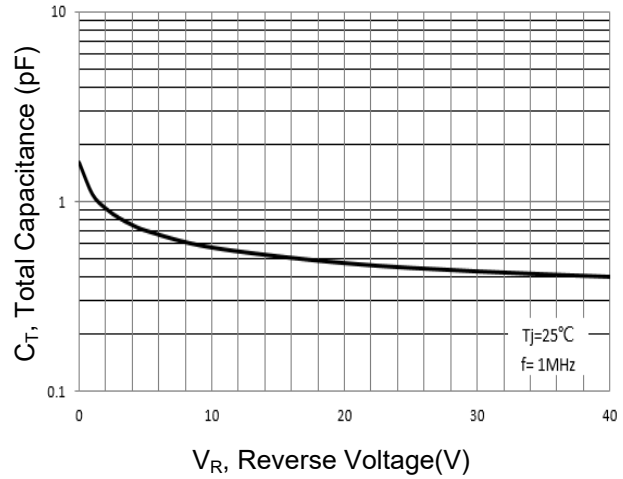
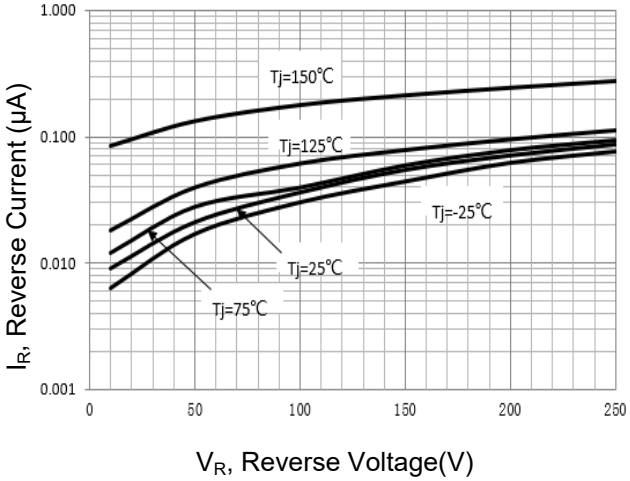
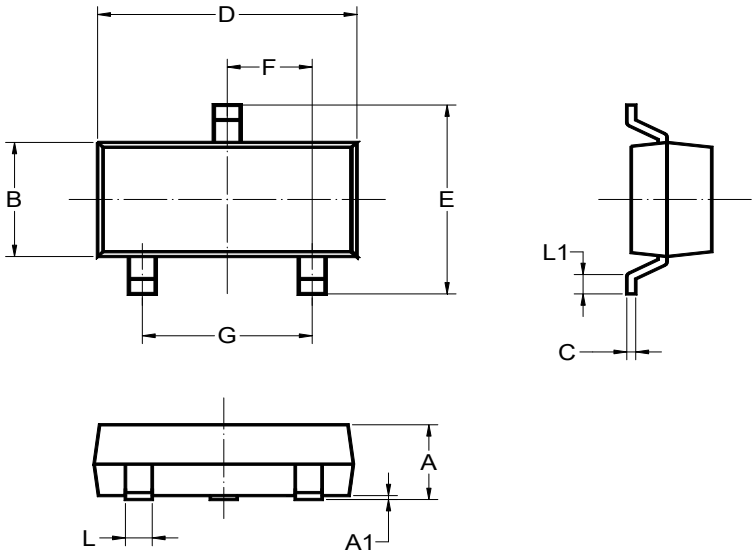


Fig 4. Reverse Characteristic Curve

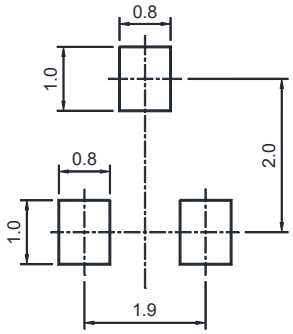


Package Outline (Dimensions in mm) SOT-23



Unit	A	A1	B	C	D	E	F	G	L	L1
mm	1.20 0.89	0.100 0.013	1.40 1.20	0.19 0.08	3.04 2.80	2.6 2.2	1.02 0.89	2.04 1.78	0.51 0.37	0.2 MIN

Recommended Soldering Footprint

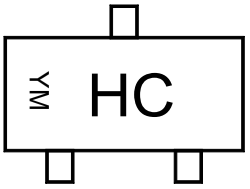


Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-23	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" HC " = Part No.
" YM " = Date Code Marking
" Y " = Year
" M " = Month
Font type: Arial



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