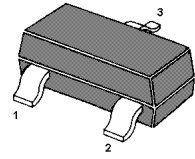
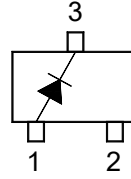


BAS25-AH

High Voltage Silicon Epitaxial Planar Switching Diodes

Features

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



SOT-23 Plastic Package

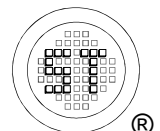
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

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	I_{FSM}	0.5 2.5	A
Total Device Dissipation	P_{tot}	350	mW
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient ¹⁾	$R_{\theta JA}$	357	$^\circ\text{C/W}$

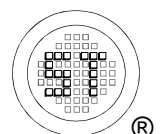
¹⁾ Device mounted on FR-4 PCB with minimum recommended pad layout.



BAS25-AH

Characteristics at $T_a = 25^\circ$

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



BAS25-AH

Electrical Characteristic Curve

Fig 1. Power Derating Curve

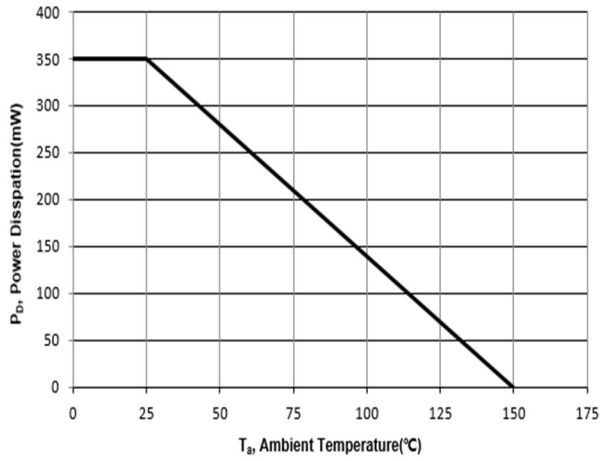


Fig 2. Forward Characteristic Curve

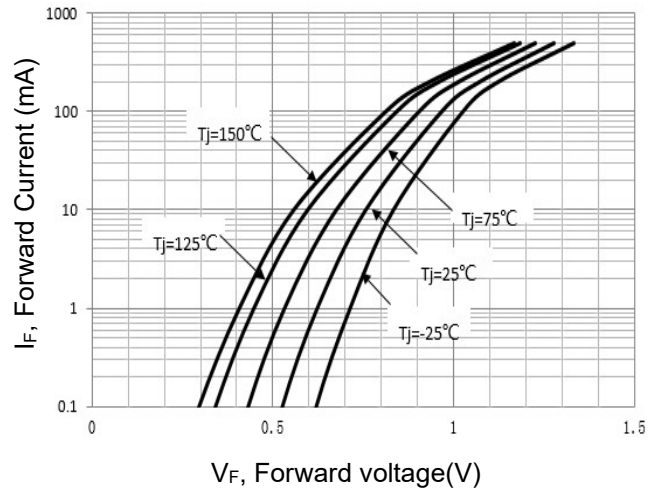


Fig 3. Total Capacitance Curve

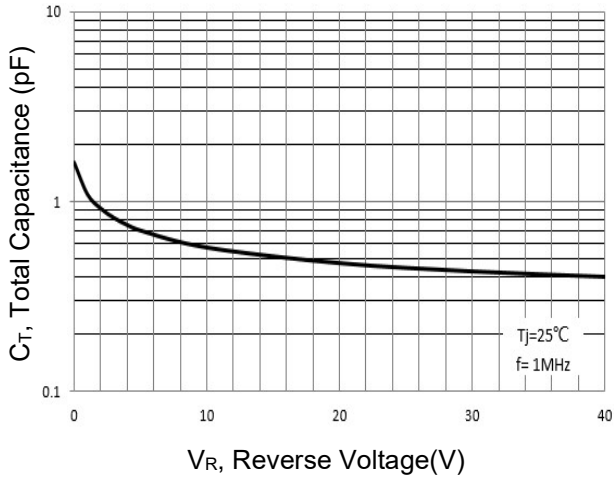
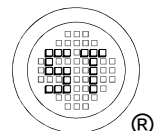
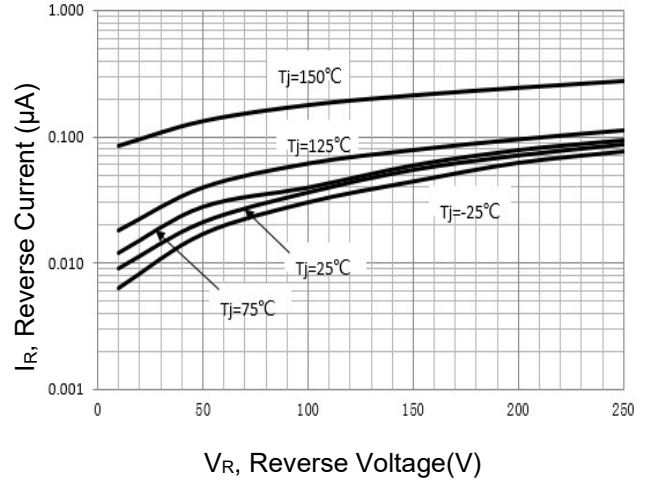


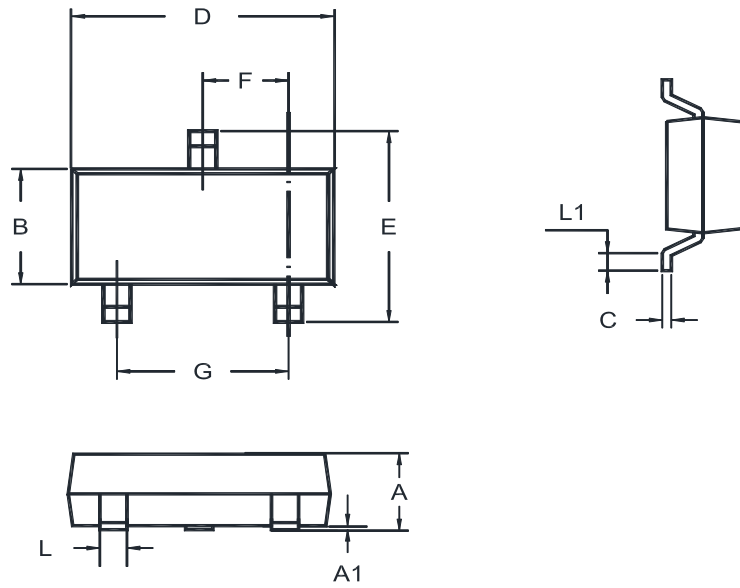
Fig 4. Reverse Characteristic Curve



BAS25-AH

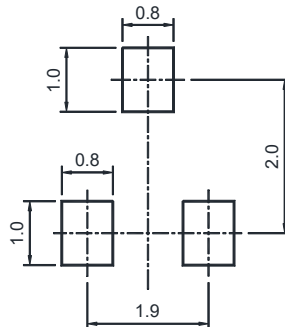
Package Outline (Dimensions in mm)

SOT-23



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

Recommended Soldering Footprint

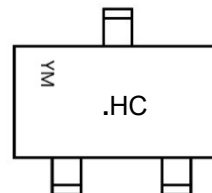


Packing information

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.
- " • " = HAF (Halogen and Antimony Free)
- " YM " = Date Code Marking
- " Y " = Year
- " M " = Month



Font type: Arial

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