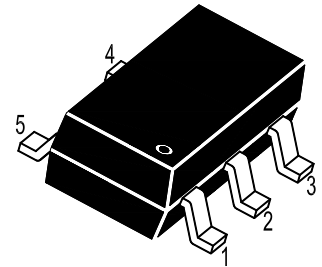
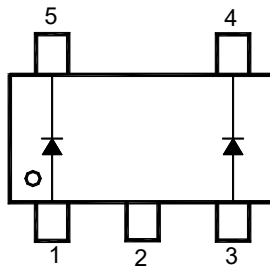


# BAS21SFJDW-AH

## High Voltage Switching Diode

### Features

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



1. Anode 2. NC 3. Anode  
4. Cathode 5. Cathode  
SOT-353 Plastic package

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

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
		at $t = 1\text{ s}$ at $t = 1\ \mu\text{s}$	
Total Device Dissipation	$P_D$	300	mW
Operating Junction and Storage Temperature Range	$T_j, T_{stg}$	- 55 to + 150	$^\circ\text{C}$

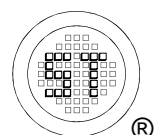
### Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance - Junction to Ambient <sup>1)</sup>	$R_{\theta JA}$	417	$^\circ\text{C/W}$

<sup>1)</sup> Device mounted on FR-4 substrate PC board, with minimum recommended pad layout.

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage	$V_F$	-	1	V
at $I_F = 100\text{ mA}$		-	1.25	V
at $I_F = 200\text{ mA}$		-	-	-
Reverse Breakdown Voltage	$V_{(BR)}$	250	-	V
at $I_R = 100\ \mu\text{A}$				
Reverse Current	$I_R$	-	100	nA
at $V_R = 200\text{ V}$		-	100	$\mu\text{A}$
at $V_R = 200\text{ V}, T_j = 150^\circ\text{C}$				
Junction Capacitance	$C_j$	-	5	pF
at $V_R = 0\text{ V}, f = 1\text{ MHz}$				
Reverse Recovery Time	$t_{rr}$	-	50	ns
at $I_F = 10\text{ mA}, I_R = 60\text{ mA}, I_{rr} = 0.1 \times I_R$				



# BAS21SFJDW-AH

## Electrical Characteristic Curves

Fig 1. Power Derating Curve

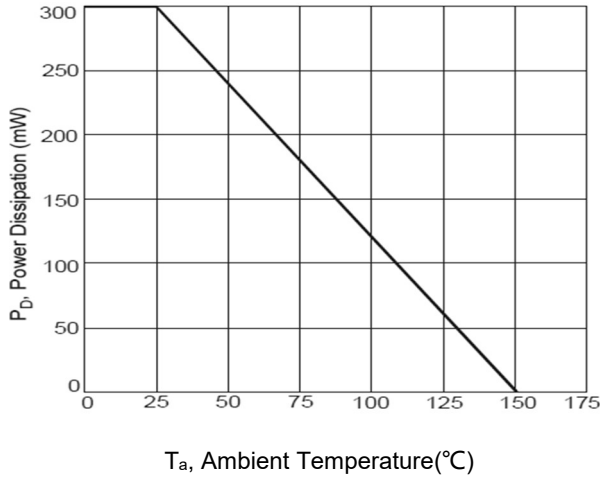


Fig 2. Forward Characteristic Curve

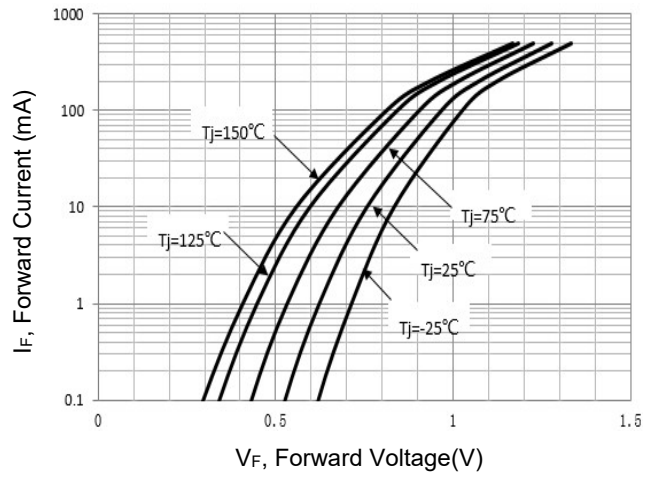


Fig 3. Reverse Characteristic Curve

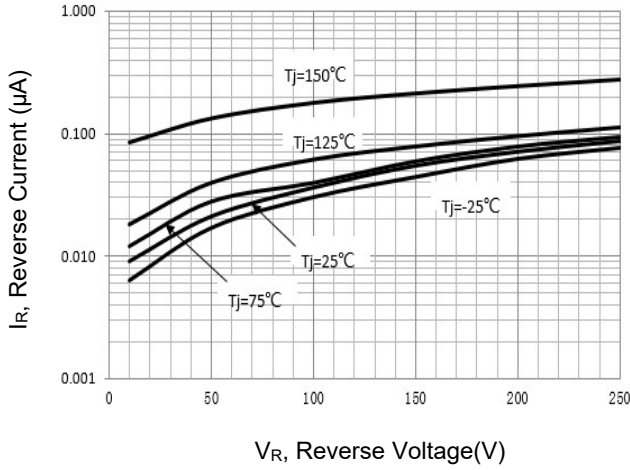
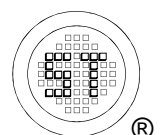
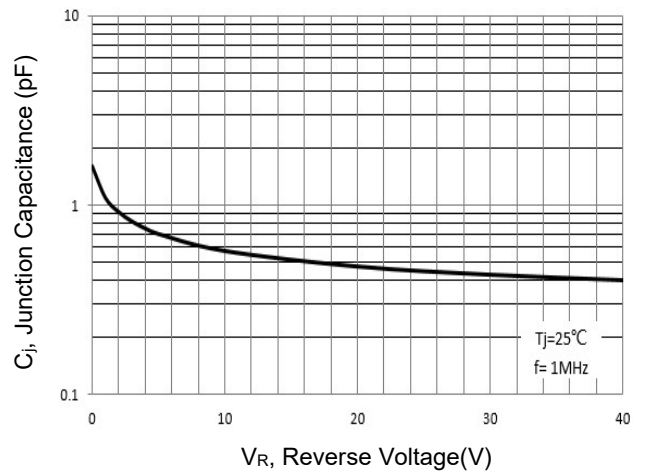


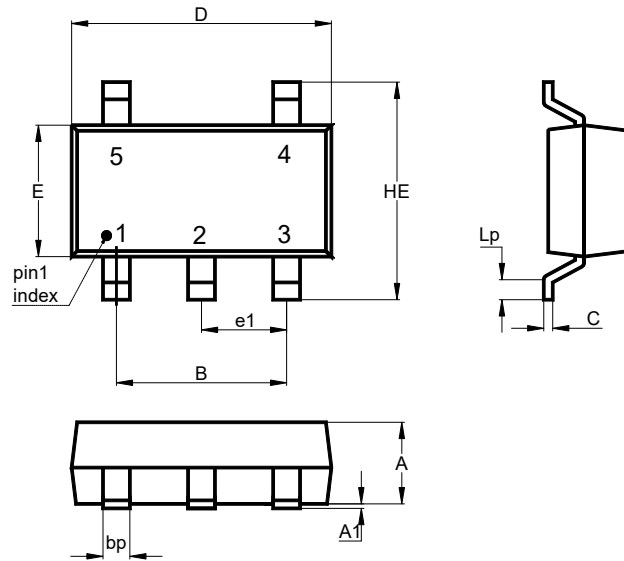
Fig 4. Junction Capacitance



# BAS21SFJDW-AH

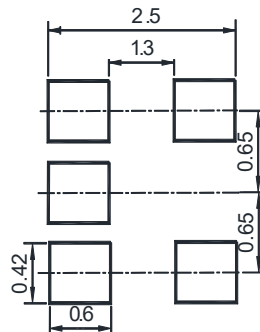
## Package Outline (Dimensions in mm)

SOT-353



Unit	A	A1	B	C	D	E	e1	HE	Lp	bp
mm	1.0	0.1	1.3	0.25	2.2	1.35	0.65	2.2	0.4	0.3
	0.9	0	typ.	0.1	1.8	1.15	typ.	2.0	0.15	0.1

## Recommended Soldering Footprint

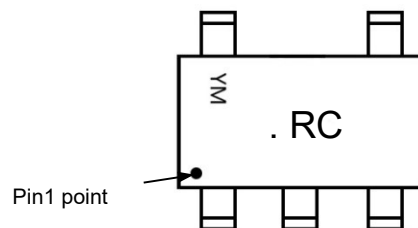


## Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-353	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

## Marking information

- " RC " = Part No.
- " . " = HAF (Halogen and Antimony Free)
- "YM" = Date Code Marking
- "Y" = Year
- "M" = Month



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