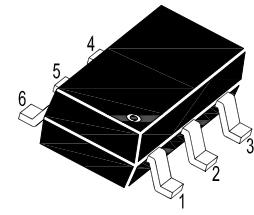
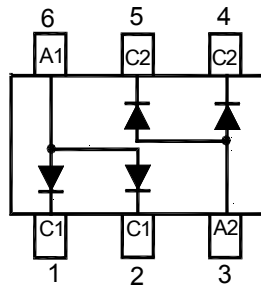


BAW56DW-AH

Silicon Epitaxial Planar Switching Diode

Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance
- AEC-Q101 Qualified
- Halogen and Antimony Free(HAF), RoHS compliant



1. Cathode 2. Cathode 3. Anode
4. Cathode 5. Cathode 6. Anode
Marking Code : A1
SOT-363 Plastic package

Applications

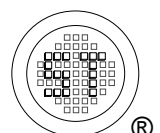
- Ultra high speed switching application

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	90	V
Continuous Reverse Voltage	V_R	90	V
Forward Current (DC)	I_F	250	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	0.5 1 4	A
		at $t = 1$ s at $t = 1$ ms at $t = 1$ μ s	
Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage	V_F	715 855 1 1.25	mV mV V V
at $I_F = 1$ mA at $I_F = 10$ mA at $I_F = 50$ mA at $I_F = 150$ mA			
Reverse Current	I_R	30 1 30 50	nA μ A μ A μ A
at $V_R = 25$ V at $V_R = 75$ V at $V_R = 25$ V, $T_j = 150^\circ\text{C}$ at $V_R = 75$ V, $T_j = 150^\circ\text{C}$			
Diode Capacitance	C_d	2	pF
at $V_R = 0$, $f = 1$ MHz			
Reverse Recovery Time	t_{rr}	4	ns
at $I_F = 10$ mA, $V_R = 6$ V, $I_{rr} = 0.1 \cdot I_R$, $R_L = 100 \Omega$			



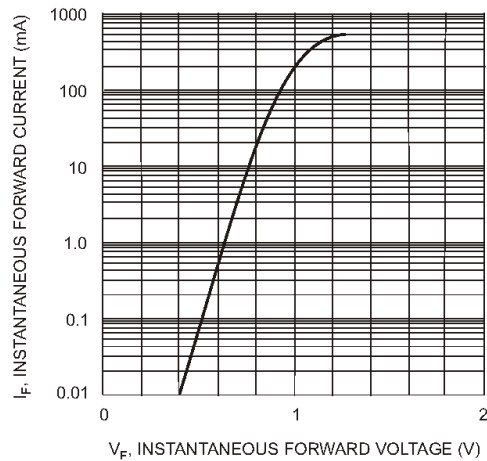


Fig. 1 Forward Characteristics

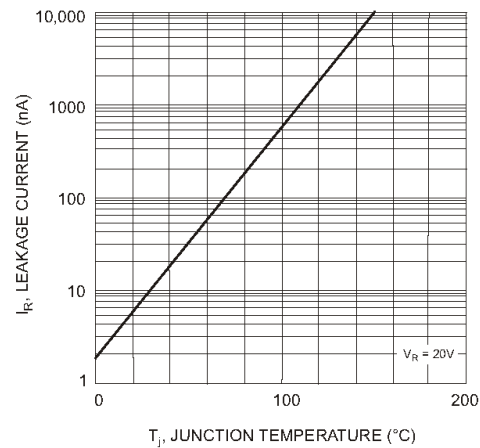


Fig. 2 Leakage Current vs Junction Temperature

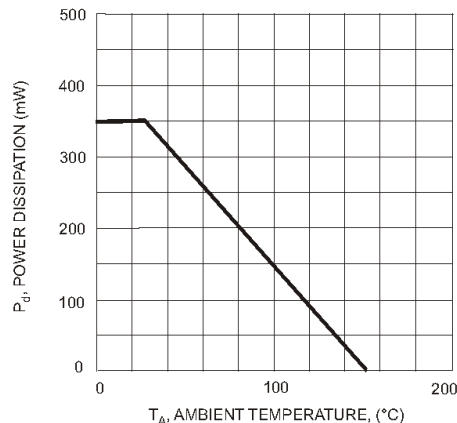
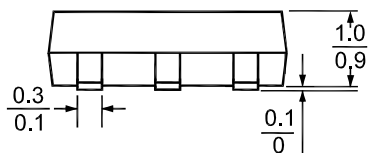
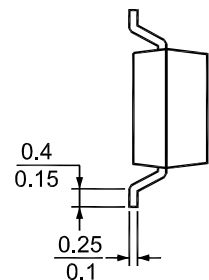
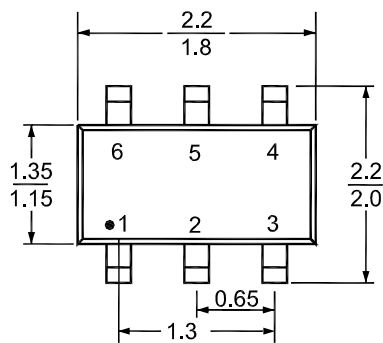


Fig. 3 Power Derating Curve, total package

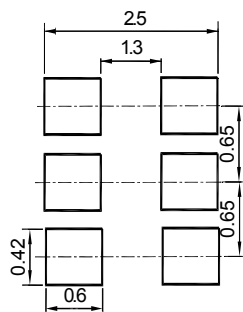
BAW56DW-AH

Package Outline Dimensions (Units: mm)

SOT-363



Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-363	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" • " = HAF (Halogen and Antimony Free(HAF))

" A1 " = Part No.

YM = Date Code Marking

Y = Year

M = Month

Font type: Arial

