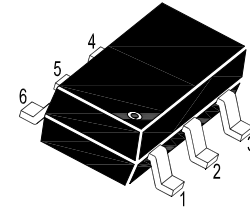
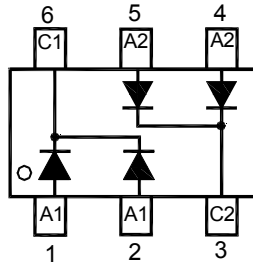


# BAV70DW

## Silicon Epitaxial Planar Switching Diode

### Features

- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications
- High conductance



1. Anode      2. Anode      3. Cathode  
 4. Anode      5. Anode      6. Cathode  
 Marking Code: A4  
 SOT-363 Plastic package

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	100	V
Reverse Voltage	$V_R$	100	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Forward Continuous Current	$I_{FM}$	450	mA
Non-Repetitive Peak Forward Current	$I_{FSM}$	4	A
		1	
		0.5	
Power Dissipation	$P_{tot}$	350	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 50 \text{ mA}$ at $I_F = 150 \text{ mA}$	$V_F$	-	0.715	V
		-	0.855	
		-	1	
		-	1.25	
Peak Reverse Current at $V_R = 25 \text{ V}$ at $V_R = 80 \text{ V}$ at $V_R = 25 \text{ V}, T_j = 150^\circ\text{C}$ at $V_R = 80 \text{ V}, T_j = 150^\circ\text{C}$	$I_R$	-	30	nA
		-	0.5	$\mu\text{A}$
		-	30	$\mu\text{A}$
		-	100	$\mu\text{A}$
Total Capacitance at $V_R = 0 \text{ V}, f = 1 \text{ MHz}$	$C_T$	-	1.5	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \ \Omega$	$t_{rr}$	-	4	ns

**TOP DYNAMIC**

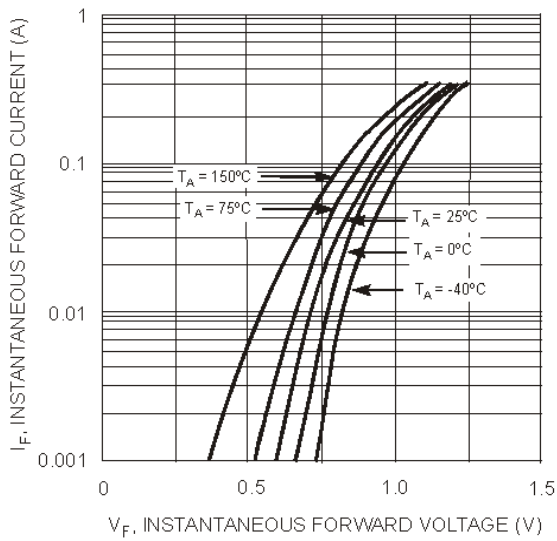


Fig. 1 Forward Characteristics

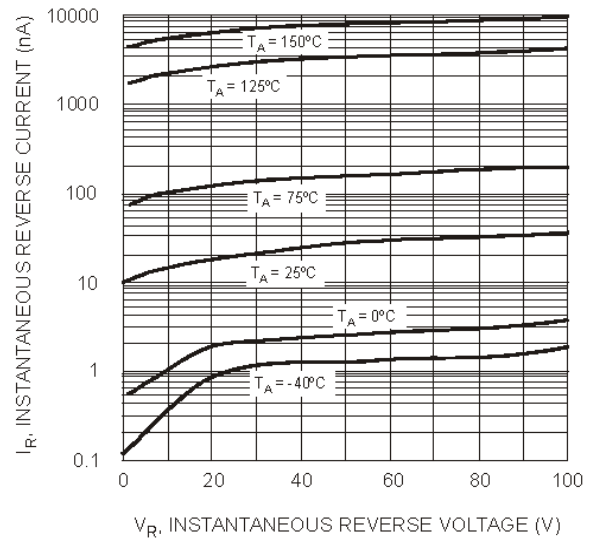


Fig. 2 Typical Reverse Characteristics

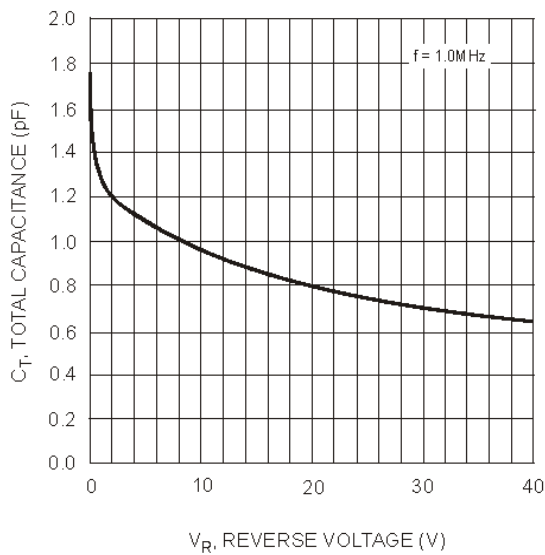


Fig. 3 Typical Capacitance vs. Reverse Voltage

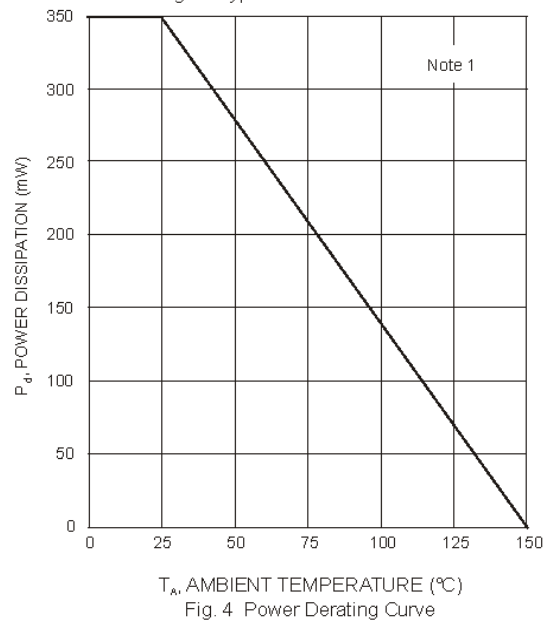
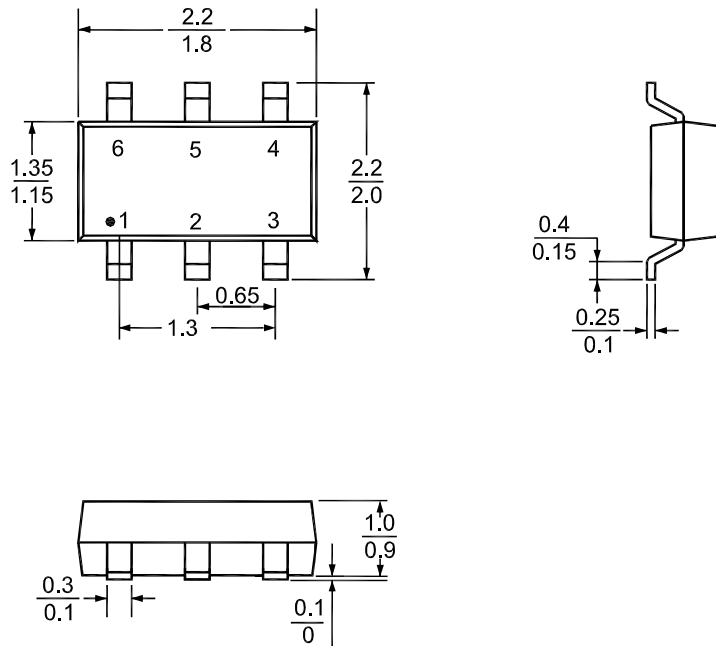


Fig. 4 Power Derating Curve

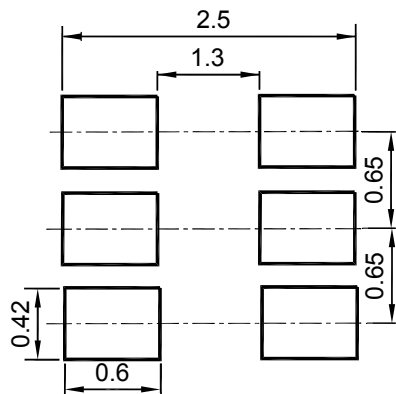
# BAV70DW

## 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

**TOP DYNAMIC**