

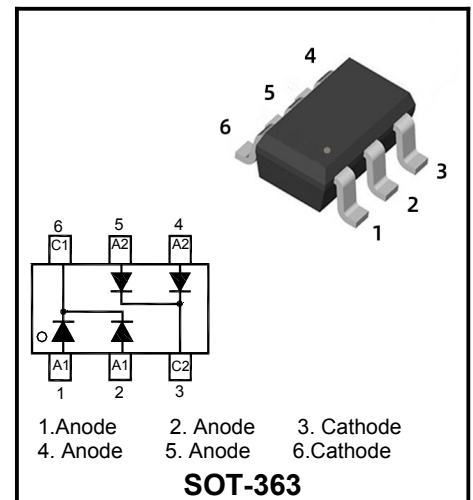
Silicon Epitaxial Planar Switching Diode

Features

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

Marking Code

BAV70DW	KJA
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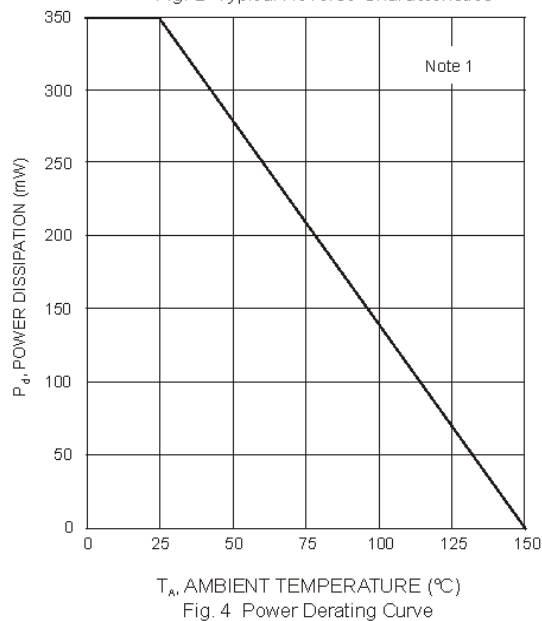
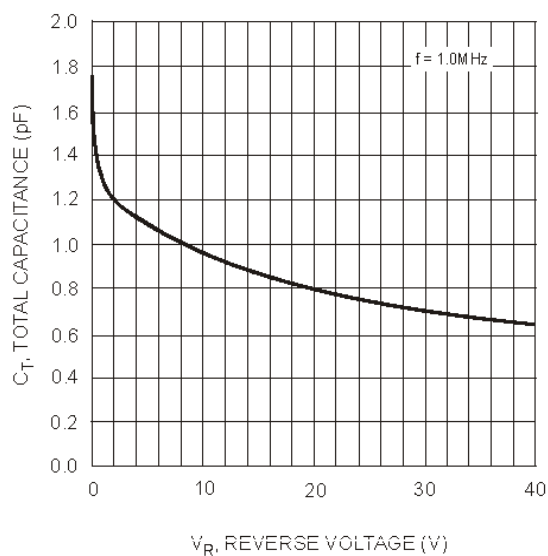
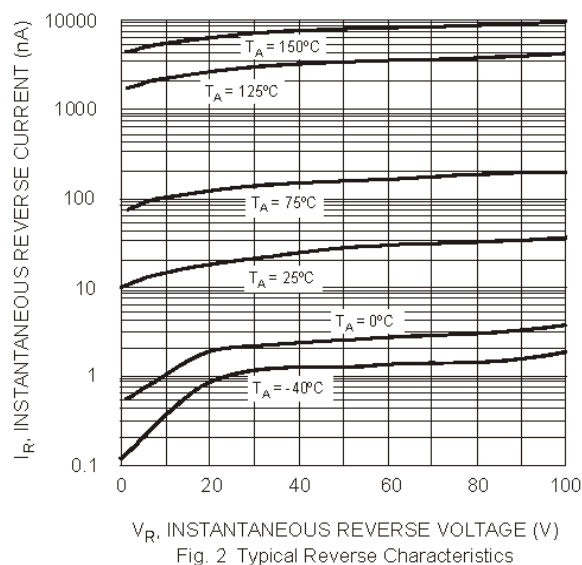
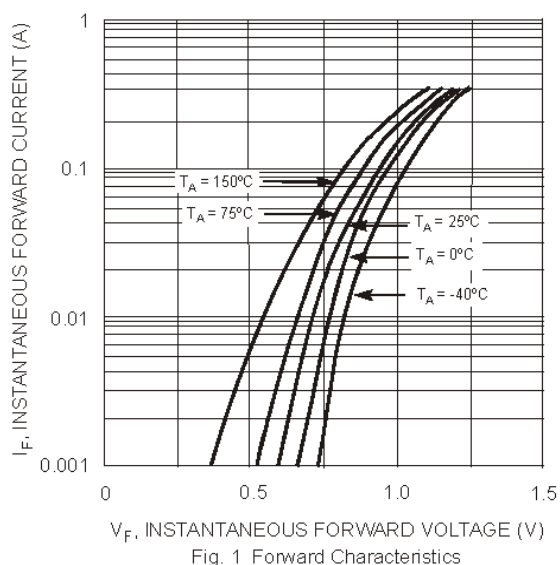
Absolute Maximum Ratings (Ta=25°C)

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 1 0.5	A
	$t = 1 \mu s$ $t = 1 ms$ $t = 1 s$		
Power Dissipation	P_{tot}	350	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	°C

Electrical Characteristics (Ta=25°C unless otherwise specified.)

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

Typical Characteristics



Ordering information

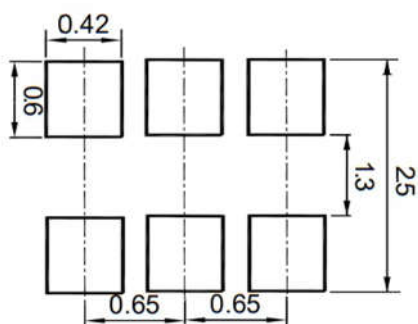
Package	Packing Description	Packing Quantity
SOT-363	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOT-363

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
A1	-	0.1	-	3.94
bp	0.20	0.30	7.87	11.81
c	0.10	0.25	3.94	9.84
D	1.8	2.2	70.87	86.61
E	1.15	1.35	45.28	53.15
e	1.3		51.18	
e1	0.65		25.6	
HE	2.0	2.2	78.74	86.6
Lp	0.15	0.45	5.90	17.71
Q	0.15	0.25	5.90	9.84
v	0.2		7.78	
w	0.2		7.78	
y	0.1		3.94	

The recommended mounting pad size



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