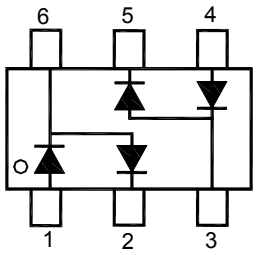
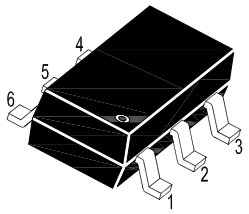
BAV99DW-HAF

Silicon Epitaxial Planar Switching Diode





1. A1 2. C1 3. AC2
4. A2 5. C2 6. AC1
Marking Code: **A7**
SOT-363 Plastic package

Features

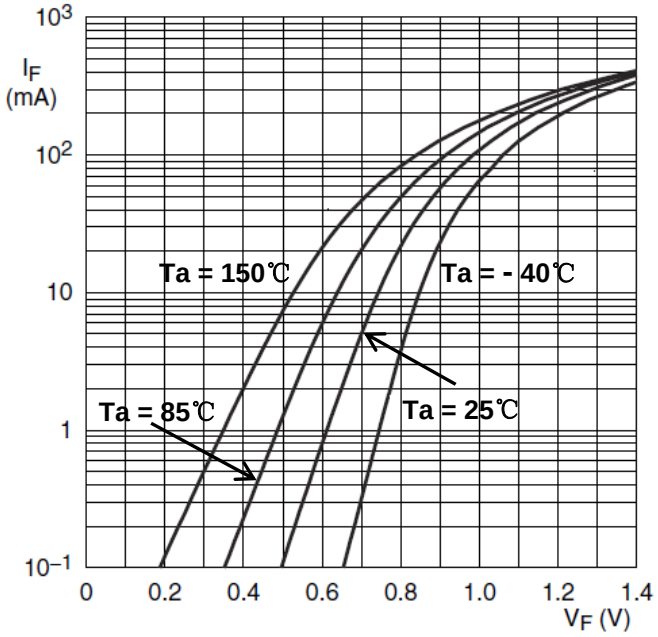
• Halogen and Antimony Free(HAF), RoHS compliant

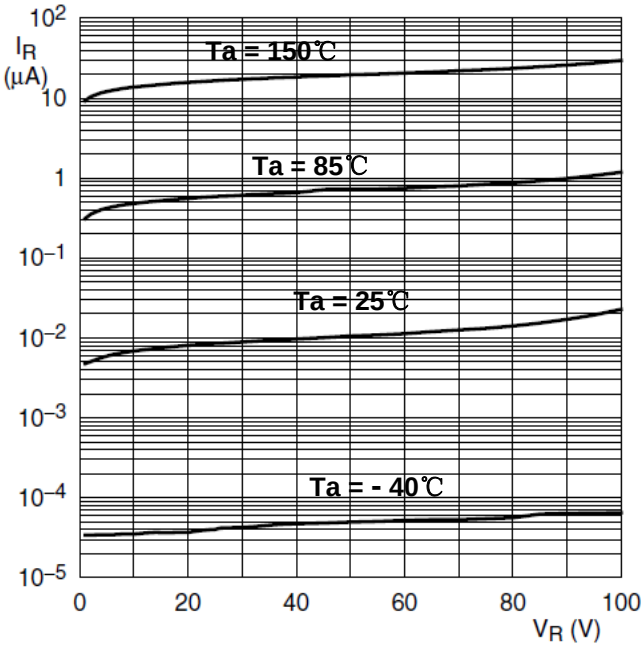
Absolute Maximum Ratings (T_a = 25℃)

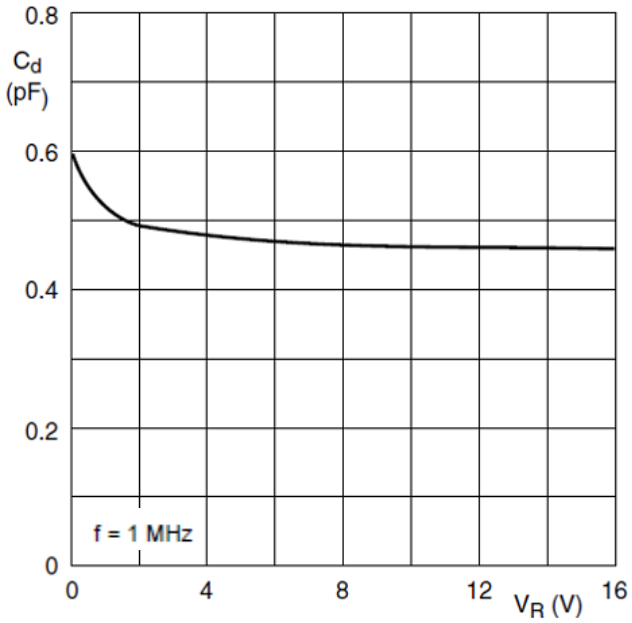
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	100	V
Continuous Forward Current Single Diode Load Double Diode Load	I_F	150 130	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current at t = 1 μs at t = 1 ms at t = 1 s	I_{FSM}	4 1 0.5	A
Total Power Dissipation	P_{tot}	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	℃/W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	- 55 to + 150	℃

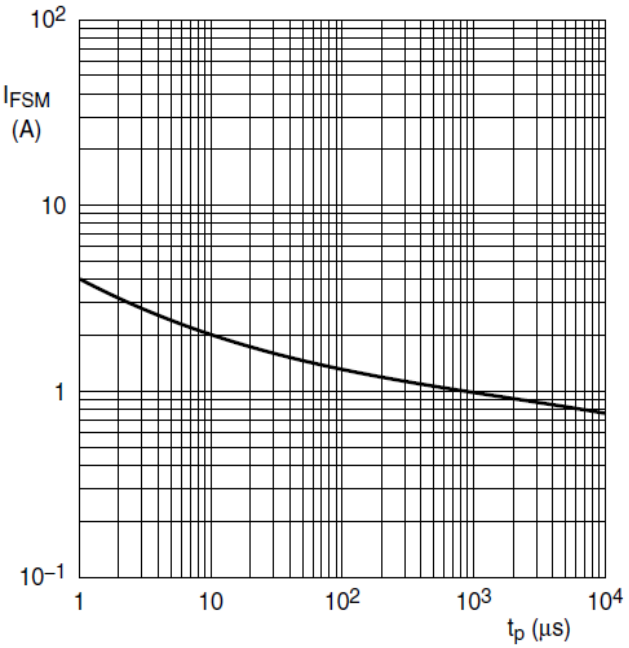
Characteristics at T_a = 25℃

Parameter	Symbol	Max.	Unit
Forward Voltage at I_F = 1 mA at I_F = 10 mA at I_F = 50 mA at I_F = 150 mA	V_F	 0.715 0.855 1 1.25	V
Reverse Current at V_R = 25 V at V_R = 80 V at V_R = 25 V, T_j = 150℃ at V_R = 80 V, T_j = 150℃	I_R	 30 0.5 30 50	 nA μA μA μA
Diode Capacitance at V_R = 0, f = 1 MHz	C_d	1.5	pF
Reverse Recovery Time at I_F = I_R = 10 mA, I_{rr} = 0.1 X I_R , R_L = 100 Ω	t_{rr}	4	ns


10^3
I_F (mA)
10^2
10
1
10^{-1}
Ta = 150℃
Ta = - 40℃
Ta = 85℃
Ta = 25℃
0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
V_F (V)


10^2
I_R (μA)
10
1
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
Ta = 150℃
Ta = 85℃
Ta = 25℃
Ta = - 40℃
0
20
40
60
80
100
V_R (V)


0.8
C_d (pF)
0.6
0.4
0.2
0
f = 1 MHz
0
4
8
12
16
V_R (V)


10^2
I_{FSM} (A)
10
1
10^{-1}
1
10
10^2
10^3
10^4
t_p (μs)

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