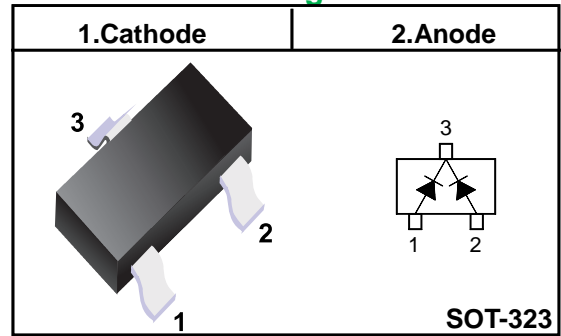


Silicon Epitaxial Planar Switching Diode

Pinning



Marking Code

BAV70W	A4
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Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Continuous Forward Current Single diode loaded Double diode loaded	I_F	175 100	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-repetitive Peak Forward Surge Current at t = 1 s at t = 1 ms at t = 1 μ s	I_{FSM}	0.5 1 4	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

Characteristics at Ta = 25°C

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu A$	$V_{BR(R)}$	75	-	V
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 Leakage Current at $V_R = 25 V$ at $V_R = 75 V$ at $V_R = 25 V, T_J = 150 ^\circ C$ at $V_R = 75 V, T_J = 150 ^\circ C$	I_R	- - - -	30 2.5 60 100	nA μA μA μA
Diode Capacitance at $V_R = 0 V, f = 1 MHz$	C_{tot}	-	2	pF
Reverse Recovery Time at $I_F = 10 mA$ to $I_R = 10 mA, I_{rr} = 0.1 I_R, R_L = 100 \Omega$	t_{rr}	-	4	ns

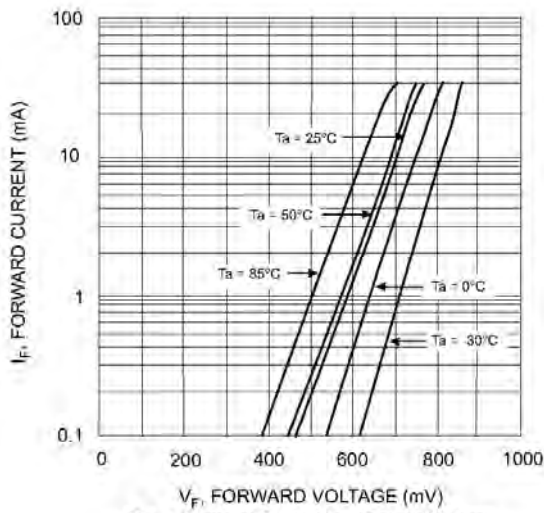


Fig. 1 Forward Current vs. Forward Voltage

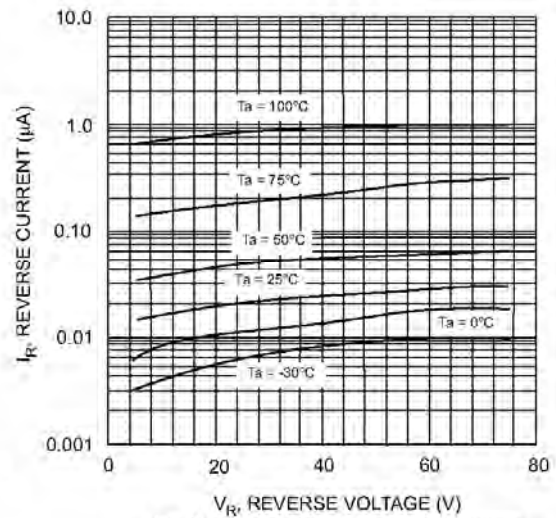


Fig. 2 Reverse Current vs Reverse Voltage

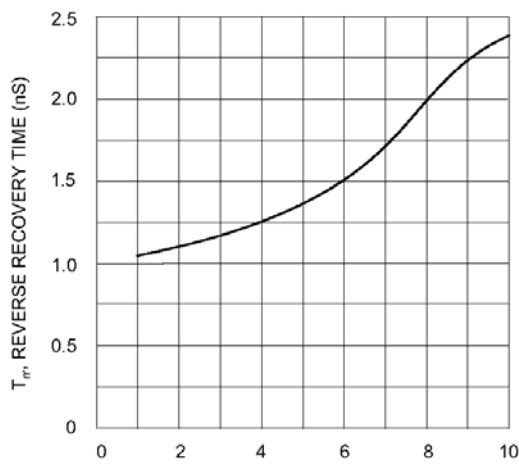


Fig. 3. Reverse Recovery Time vs. Forward Current

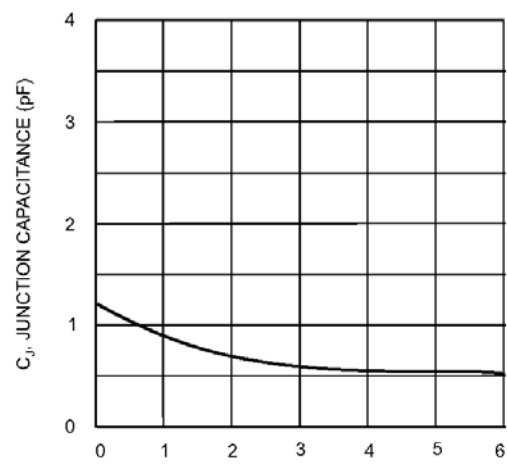


Fig. 4. Typical Junction Capacitance vs. Reverse Voltage

Ordering information

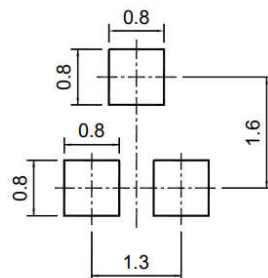
Package	Packing Description	Base Quantity	Packing Quantity
SOT-323	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-323

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
A1	0.1		4	
bp	0.3	0.4	12	16
C	0.10	0.25	4	10
D	1.8	2.2	71	87
E	1.15	1.35	45	53
E	1.3		51	
E1	0.65		26	
HE	2.0	2.2	79	87
Lp	0.15	0.45	6	18
Q	0.13	0.23	5.1	9
v	0.2		8	
W	0.2		8	

The recommended mounting pad size



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