

BAV170

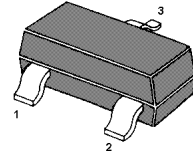
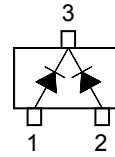
Silicon Epitaxial Planar Diode

Low leakage switching double diode

For low leakage current applications

Feature

- Very low leakage current
- Medium speed switching times
- Series pair configuration



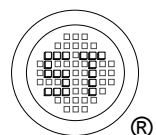
Marking Code: **C7**
TO-236 Plastic Package

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous Reverse Voltage	V_R	85	V
Continuous Forward Current	$I_{F(AV)}$	215	mA
Single Diode		125	
Double Diode			
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	4	A
at $t = 1\ \mu\text{s}$		1	
at $t = 1\ \text{ms}$		0.5	
at $t = 1\ \text{s}$			
Power Dissipation	P_{tot}	250	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\ \mu\text{A}$	$V_{(BR)R}$	85	-	-	V
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	- - - -	- - - -	0.9 1 1.1 1.25	V
Reverse Current at $V_R = 75\ \text{V}$ at $V_R = 75\ \text{V}, T_j = 150^\circ\text{C}$	I_R	- -	- -	5 80	nA
Total Capacitance at $V_R = 0, f = 1\ \text{MHz}$	C_{tot}	-	2	-	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}	-	-	3	μs



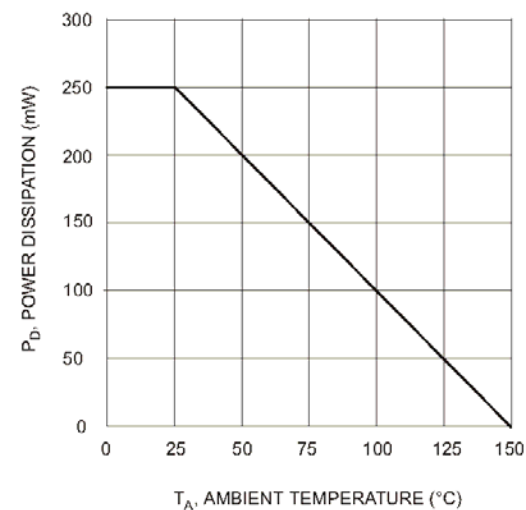


Fig. 1 Power Derating Curve

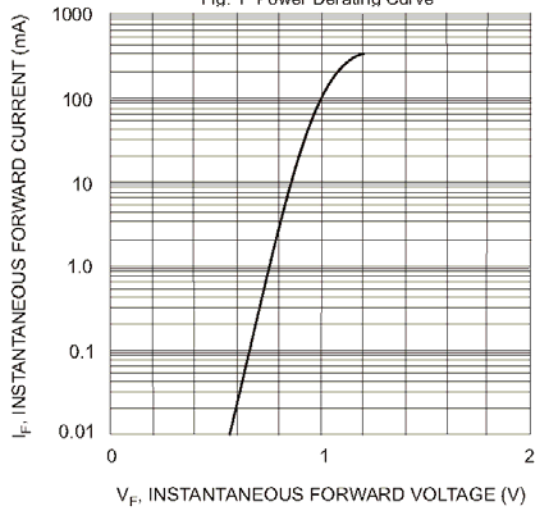


Fig. 3 Typical Forward Characteristics

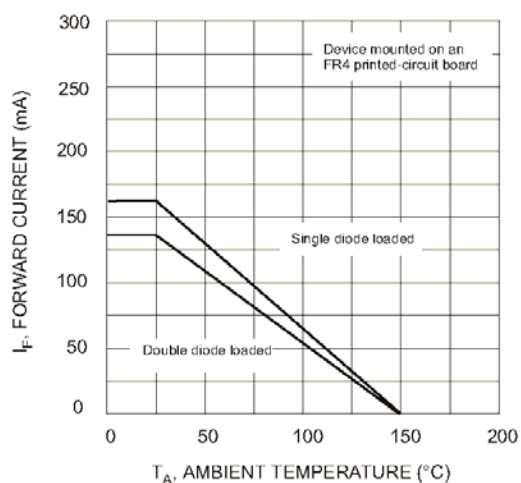


Fig. 2 Current Derating Curve

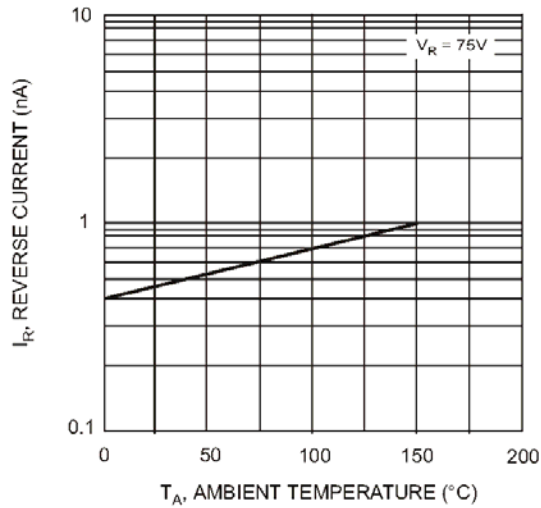


Fig. 4 Typical Reverse Characteristics

