

MMBD7000

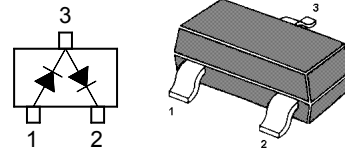
Silicon Epitaxial Planar Switching Diode

Features

- Fast switching speed
- High Conductance

Applications

- For general purpose switching



Marking Code: **A7**
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	100	V
Forward Current	I_F	200	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	1 2	A
		at $t = 1$ s at $t = 1$ μ s	
Power Dissipation	P_d	350	mW
Junction 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
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	100	-	V
Forward Voltage at $I_F = 1$ mA at $I_F = 10$ mA at $I_F = 100$ mA at $I_F = 150$ mA	V_F	0.55 0.67 0.75 -	0.7 0.82 1.1 1.25	V
Reverse Current at $V_R = 50$ V at $V_R = 100$ V at $V_R = 50$ V, $T_j = 125^\circ\text{C}$	I_R	- - -	1 3 100	μA
Total Capacitance at $V_R = 0$ V, $f = 1$ MHz	C_T	-	2	pF
Reverse Recovery Time at $I_F = I_R = 10$ mA, $I_{rr} = 0.1 \times I_R$, $R_L = 100 \Omega$	t_{rr}	-	4	ns

TOP DYNAMIC



ISO14001 : 2004 Certificate No. 121509007
 ISO 9001 : 2008 Certificate No. 50114012
 OHSAS 18001 : 2007 Certificate No. 0513150006
 IECQ QC 080000 Certificate No. E0241000741002

Dated : 15/06/2012

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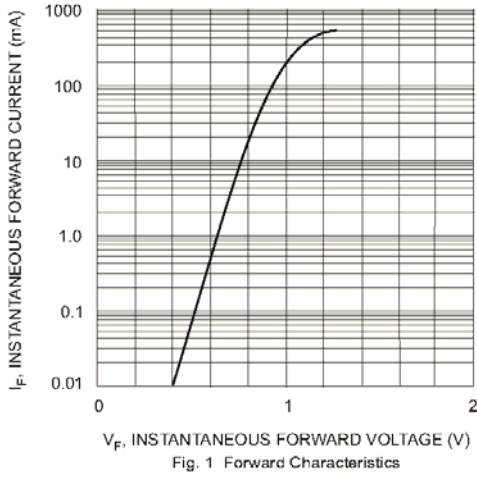


Fig. 1 Forward Characteristics

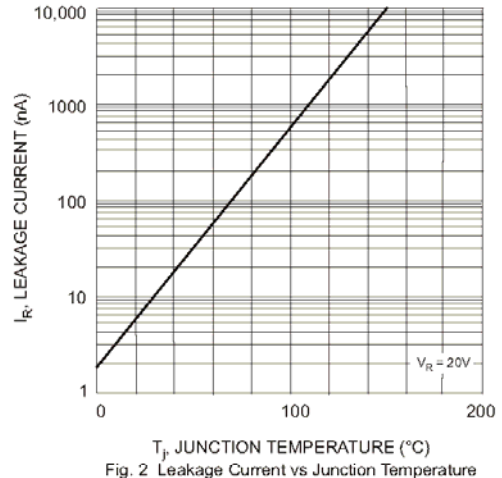


Fig. 2 Leakage Current vs Junction Temperature

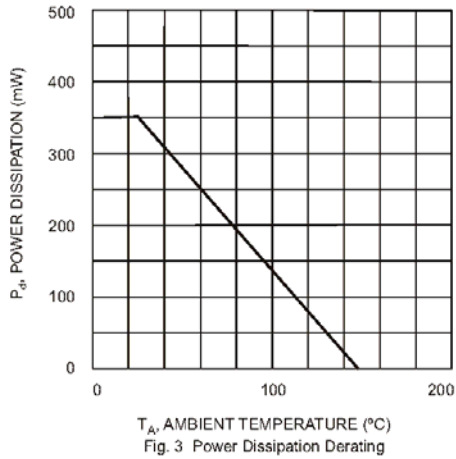


Fig. 3 Power Dissipation Derating

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