



# FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

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## MMBD7000

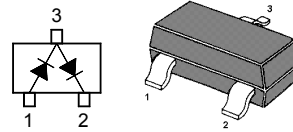
### Silicon Epitaxial Planar Switching Diode

#### Features

- Fast switching speed
- High Conductance

#### Applications

- For general purpose switching



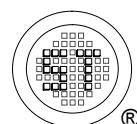
Marking Code: **A7**  
SOT-23 Plastic Package

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

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 $t = 1\text{ s}$ at $t = 1\text{ }\mu\text{s}$
Power Dissipation	$P_d$	350	mW
Junction and Storage Temperature Range	$T_j, T_{stg}$	- 65 to + 150	$^\circ\text{C}$

#### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	100	-	V
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 100\text{ mA}$ at $I_F = 150\text{ mA}$	$V_F$	0.55 0.67 0.75 -	0.7 0.82 1.1 1.25	V
Reverse Current at $V_R = 50\text{ V}$ at $V_R = 100\text{ V}$ at $V_R = 50\text{ V}, T_j = 125\text{ }^\circ\text{C}$	$I_R$	- - -	1 3 100	$\mu\text{A}$
Total Capacitance at $V_R = 0\text{ V}, f = 1\text{ MHz}$	$C_T$	-	2	pF
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}, I_{tr} = 0.1 \times I_R, R_L = 100\text{ }\Omega$	$t_{rr}$	-	4	ns



Dated : 15/06/2009



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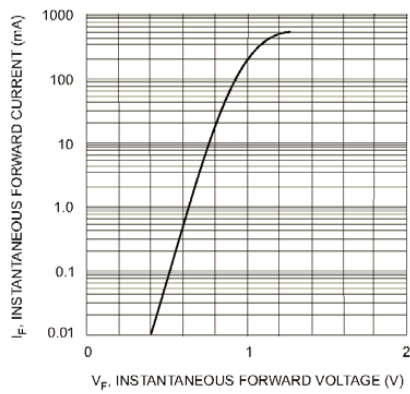


Fig. 1 Forward Characteristics

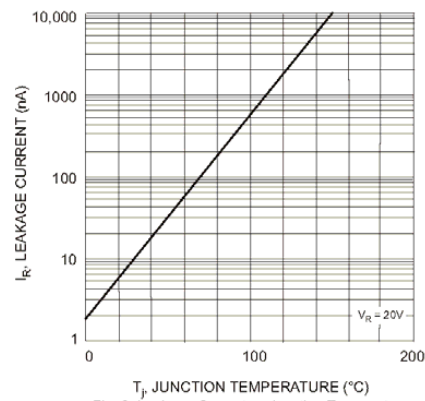


Fig. 2 Leakage Current vs Junction Temperature

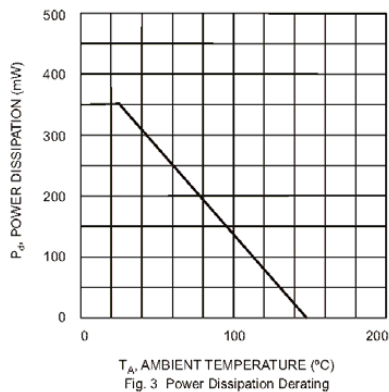
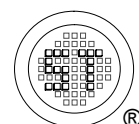


Fig. 3 Power Dissipation Derating



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