

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## MMBD7000LT1G-MS

Product specification

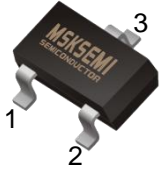
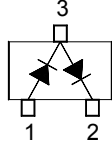

## FEATURE

- Fast switching speed
- High Conductance

## Applications

- For general purpose switching

## Reference News

SOT-23	Pin Configuration	MARKING
 <p>1. BASE 2. EMITTER 3. COLLECTOR</p>		

## 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
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 $I_F = 1\ \text{mA}$ 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 $V_R = 50\ \text{V}, T_j = 125^\circ\text{C}$	$I_R$	- - -	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 $I_F = I_R = 10\ \text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\ \Omega$	$t_{rr}$	-	4	ns

Typical Characteristics

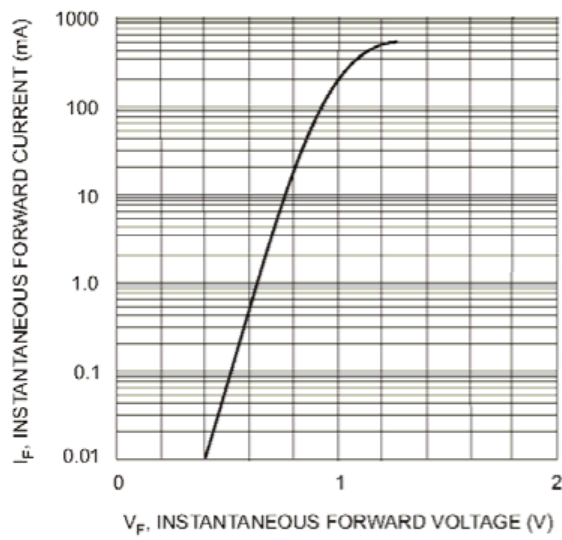


Fig. 1 Forward Characteristics

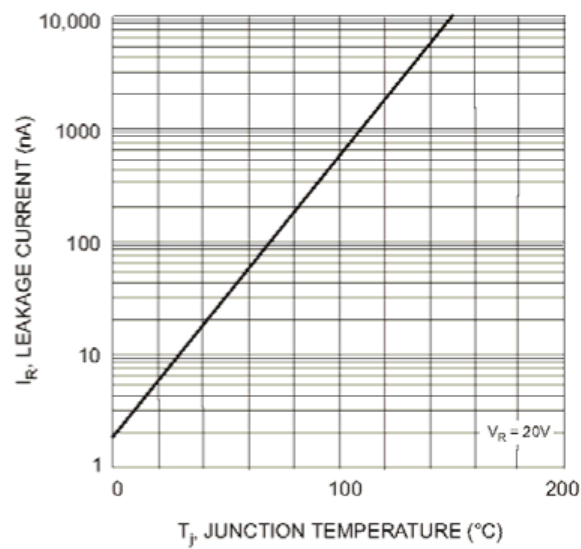


Fig. 2 Leakage Current vs Junction Temperature

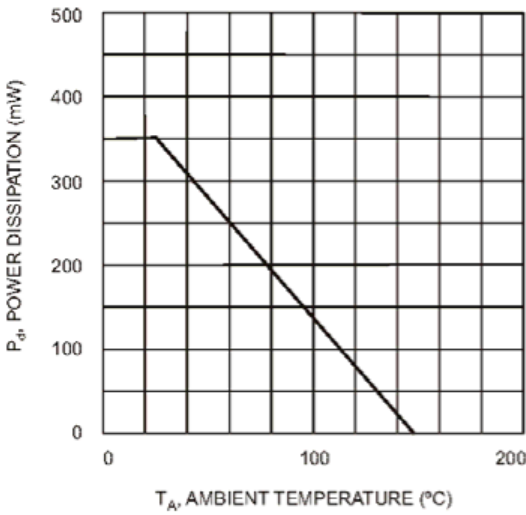
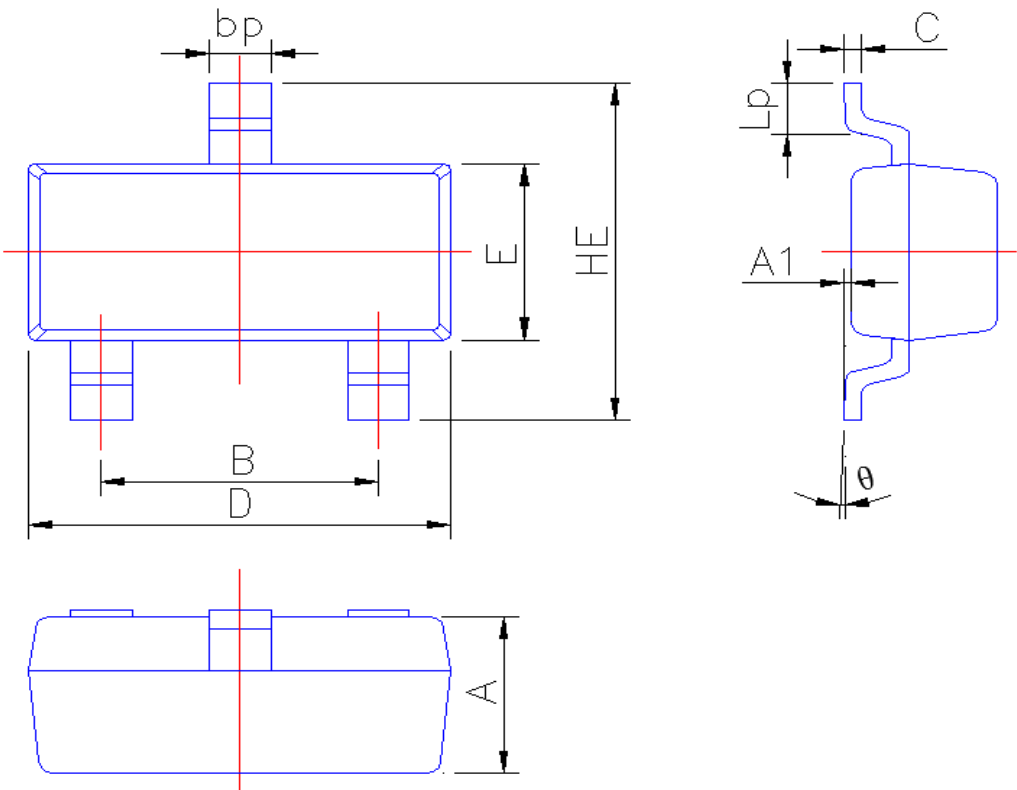


Fig. 3 Power Dissipation Derating

PACKAGE MECHANICAL DATA



SOT-23

Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.10
A1	0.013	0.100
B	1.80	2.00
bp	0.35	0.50
C	0.09	0.150
D	2.80	3.00
E	1.20	1.40
HE	2.20	2.80
Lp	0.20	0.50
$\theta$	0°	5°

REELSPECIFICATION

P/N	PKG	QTY
MMBD7000LT1G-MS	SOT-23	3000

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