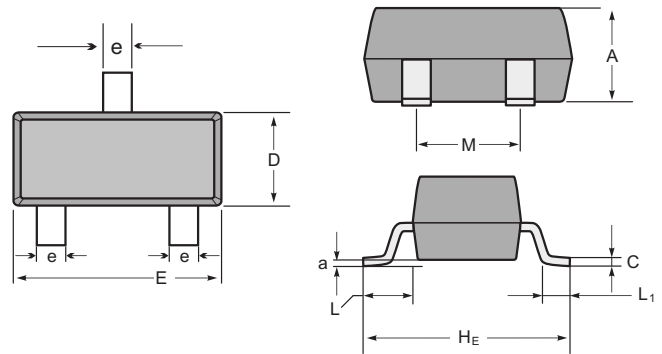
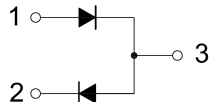
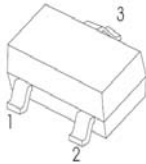




### FEATURES

Dual Switching Diode  
 Fast Switching Speed  
 Surface Mount Package Ideally Suited for Automatic Insertion  
 For General Purpose Switching Applications



SOT-23 mechanical data

UNIT		A	C	D	E	He	e	M	L	L <sub>1</sub>	a
mm	max	1.1	0.15	1.4	3.0	2.6	0.5	1.95	0.55 (ref)	0.36 (ref)	0.0
	min	0.9	0.08	1.2	2.8	2.2	0.3	1.7			0.15
mil	max	43	6	55	118	102	20	77	22 (ref)	14 (ref)	0.0
	min	35	3	47	110	87	12	67			6

### Maximum Ratings@Ta=25

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	$I_O$	200	mA
Non-Repetitive Peak Forward Surge Current @ t = 8.3 ms	$I_{FSM}$	2	A
Power Dissipation	$P_D$	225	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	°C/W
Junction temperature	$T_j$	150	°C
Storage temperature range	$T_{STG}$	-55~+150	°C

# MMBD7000LT1G

## ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	100		V
Reverse voltage leakage current	$I_R$	$V_R=50V$ $V_R=100V$		1.0 3.0	$\mu A$
Forward voltage	$V_F$	$I_F=1mA$ $I_F=10mA$ $I_F=100mA$	0.55 0.67 0.75	0.7 0.82 1.1	V
Diode capacitance	$C_T$	$V_R=0V, f=1.0MHz$		2	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$		4	ns

## RATING AND CHARACTERISTIC CURVES (MMBD7000LT1G)

