



Changshu Talent  
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# MMBD7000

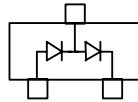
## 225mW 100Volt Dual Switching Diode

### Features

Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

- Low Current Leakage
- Low Cost
- Small Outline Surface Mount Package  
Epoxy meets UL 94 V-0 flammability rating  
Moisure Sensitivity Level 1
- Marking : M5C/ T3

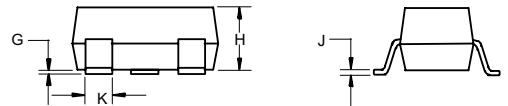
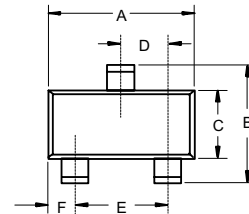
Pin Configuration  
Top View



### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance: 556°C/W Junction To Ambient

### SOT-23

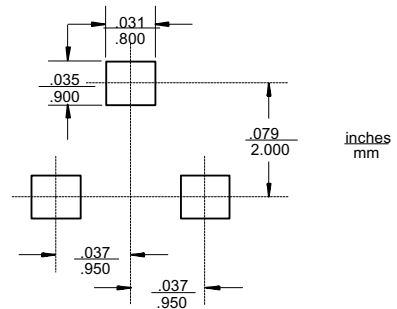


### Electrical Characteristics @ 25°C Unless Otherwise Specified

Reverse Voltage	$V_R$	100V	
Reverse Breakdown Voltage	$V_{BR}$	100V	$I_R=100\mu A$
Average Rectified Output Current	$I_O$	200mA	
Power Dissipation	$P_{TOT}$	225mW	
Peak Forward Surge Current	$I_{FSM}$	0.5A	$t=1s, Non-Repetitive$
Maximum Instantaneous Forward Voltage	$V_F$	820mV	$I_{FM} = 10mA;$ $T_J = 25^\circ C^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1.0 $\mu A$ 100 $\mu A$	$V_R=50Volts$ $T_J = 25^\circ C$ $T_J = 125^\circ C$
Maximum Junction Capacitance	$C_J$	2pF	Measured at 1.0MHz, $V_R=0V$
Reverse Recovery Time	$T_{rr}$	4nS	$I_F=10mA$ $V_R = 0V$ $R_L=500\Omega$

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

### Suggested Solder Pad Layout



\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%

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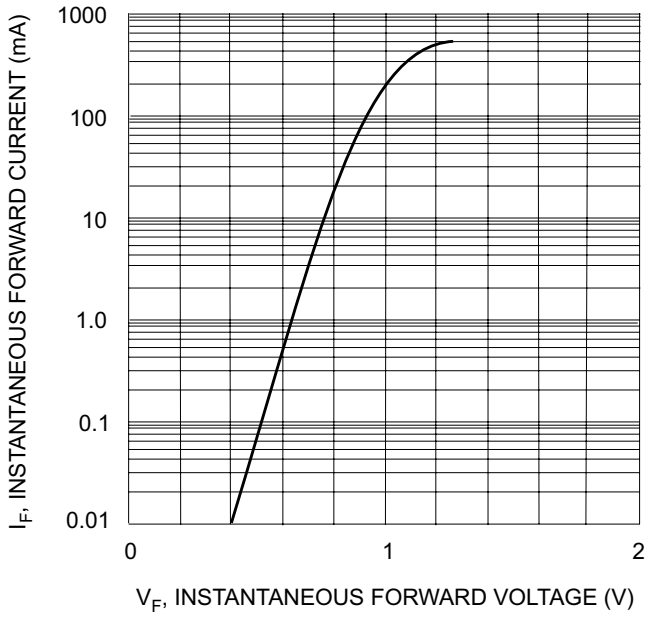


Fig. 1 Forward Characteristics

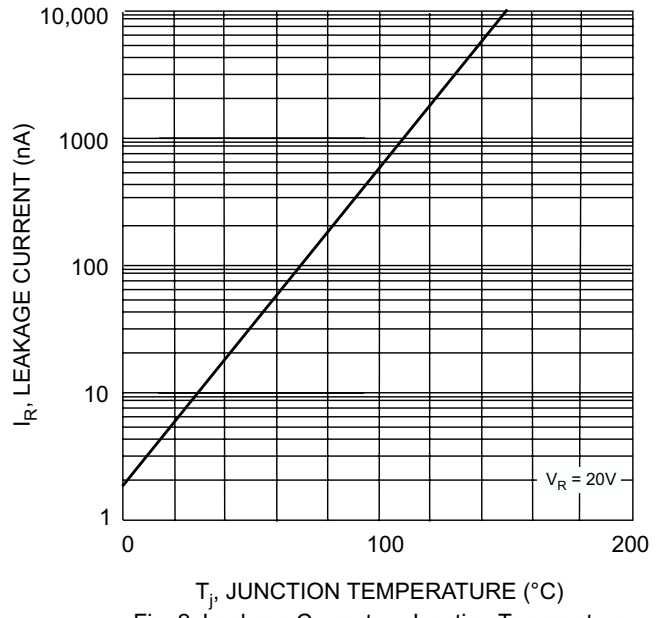


Fig. 2 Leakage Current vs Junction Temperature