



**Micro Commercial Components** 

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 (818) 701-4939 Fax:

## **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

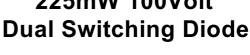
## Electrical Characteristics @ 25°C Unless Otherwise Specified

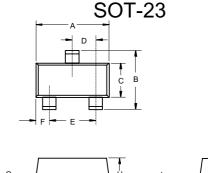
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Reverse Voltage	$V_R$	100V	
Reverse Breakdown Voltage	$V_{BR}$	100V	I <sub>R</sub> =100uA
Average Rectified	Ιο	200mA	
Output Current			
Power Dissipation	P <sub>TOT</sub>	225mW	
Peak Forward Surge	$I_{FSM}$	0.5A	t=1s,Non-Repetitive
Current			
Maximum			
Instantaneous	$V_{F}$	820mV	$I_{FM} = 10mA;$
Forward Voltage			$T_{J} = 25^{\circ}C^{*}$
Maximum DC			V <sub>R</sub> =50Volts
Reverse Current At	$I_{R}$	1.0μΑ	$T_J = 25^{\circ}C$
Rated DC Blocking		100μΑ	T <sub>J</sub> = 125°C
Voltage			
Maximum Junction	C٦	2pF	Measured at
Capacitance			1.0MHz, V <sub>R</sub> =0V
Reverse Recovery	$T_{rr}$	4nS	I <sub>F</sub> =10mA
Time			$V_R = 0V$
			$R_L$ =500 $\Omega$

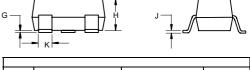
<sup>\*</sup>Pulse test: Pulse width 300 µsec, Duty cycle 2%

# **MMBD7000**

# 225mW 100Volt

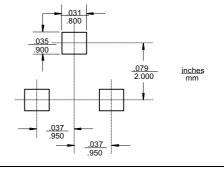


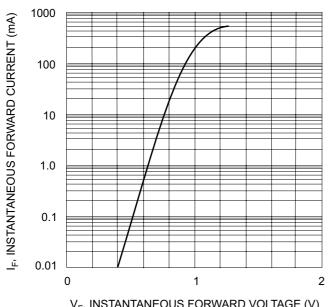


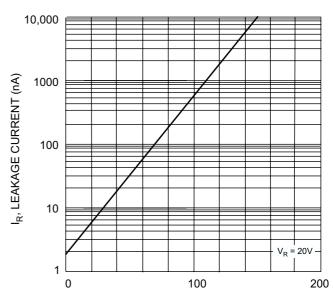


	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.110	.120	2.80	3.04	
В	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
Е	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
Ð	.0005	.0039	.013	.100	
Τ	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

## Suggested Solder Pad Layout







 $V_{\text{F}}$ , INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 1 Forward Characteristics

T<sub>j</sub>, JUNCTION TEMPERATURE (°C) Fig. 2 Leakage Current vs Junction Temperature



## **Ordering Information**

Device	Packing
(Part Number)-TP	Tape&Reel3Kpcs/Reel

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