



Micro Commercial Components

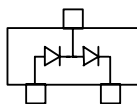


Micro Commercial Components  
20736 Marilla Street Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

## 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
- Moisture 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

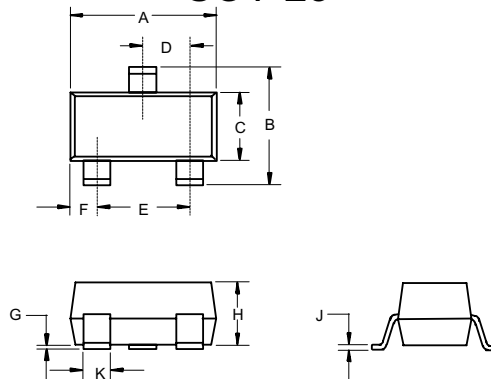
Reverse Voltage	$V_R$	100V	
Reverse Breakdown Voltage	$V_{BR}$	100V	$I_R=100\mu A$
Average Rectified Output Current	$I_O$	200mA	
Power Dissipation	$P_{TOT}$	225mW	
Peak Forward Surge Current	$I_{FSM}$	0.5A	$t=1s, \text{Non-Repetitive}$
Maximum Instantaneous Forward Voltage	$V_F$	820mV	$I_{FM} = 10mA;$ $T_J = 25^\circ C^*$
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	$I_F=10mA$ $V_R = 0V$ $R_L=500\Omega$

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

## MMBD7000

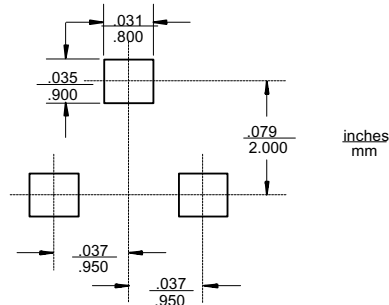
## 225mW 100Volt Dual Switching Diode

### SOT-23



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



[www.mccsemi.com](http://www.mccsemi.com)

# MMBD7000

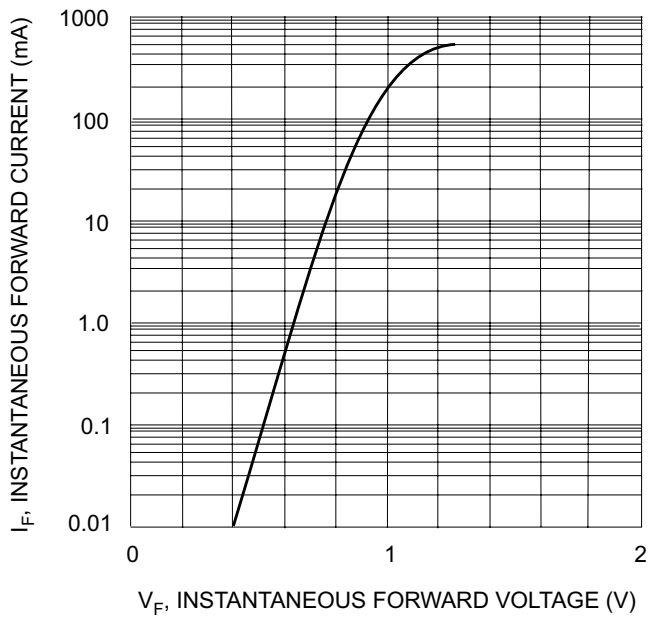


Fig. 1 Forward Characteristics

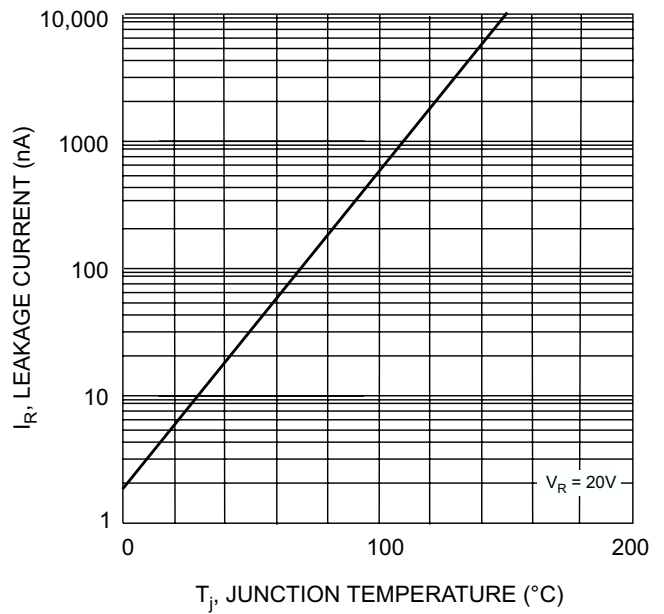


Fig. 2 Leakage Current vs Junction Temperature



Micro Commercial Components

## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

[www.mccsemi.com](http://www.mccsemi.com)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Micro Commercial Components \(MCC\):](#)

[MMBD7000T](#) [MMBD7000-TP](#)