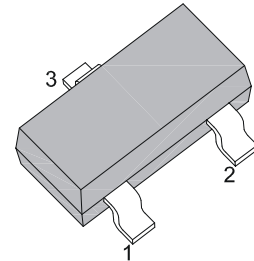


## Dual Small Signal Switching Diode

### Features

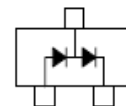
- Silicon Epitaxial Planar Diode
- Fast Switching Dual Diode. Especially Suited for Automatic Insertion
- High Conductance
- Electrically Identical to Standard JEDEC
- RoHS Compliant



### Mechanical Data

<b>Case:</b>	SOT-23, Plastic Case
<b>Terminals:</b>	Solderable per MIL-STD-202G, Method 208
<b>Weight:</b>	Approx. 0.0088 gram

### SOT-23



### Maximum Ratings *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbol	Description	MMBD7000	Unit	Conditions
	Marking Code	T3		
<b>VRM</b>	Reverse Voltage	100	V	
<b>VRRM</b>	Peak Reverse Voltage	100	V	
<b>IF(AV)</b>	Forward Average Current	200	mA	
<b>IFSM</b>	Peak Forward Surge Current, Pulse Width=1s	500	mA	
<b>PD</b>	Power Dissipation on FR-5 Board	225	mW	TA=25° C
		1.8	mW/° C	Derate above 25° C
	Total Device Dissipation on Alumina Substrate	300	mW	TA=25° C
		2.4	mW/° C	Derate above 25° C
<b>RthJA</b>	Typical Thermal Resistance	417	° C/W	Note1
<b>RthJA</b>	Junction to Ambient Air	556	° C/W	Note2
<b>TJ</b>	Maximum Junction Temperature	150	° C	
<b>Ts</b>	Storage Temperature Range	-55 to +150	° C	

Note: 1) Device on alumina substrate  
2) On FR-5 board

# Dual Small Signal Switching Diode

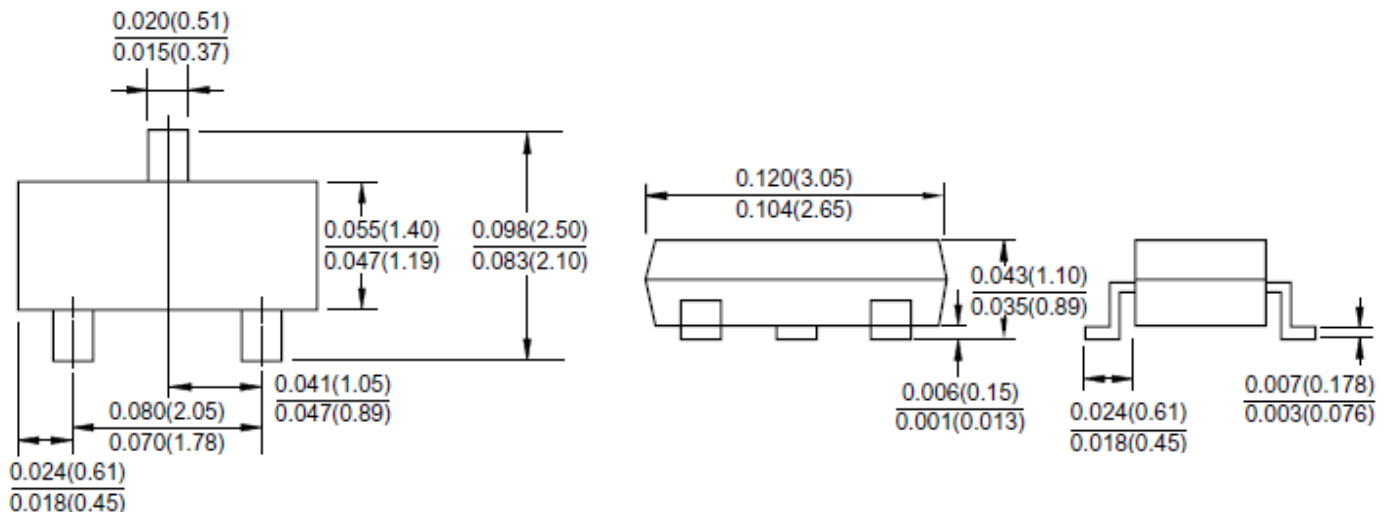
## MMBD7000

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	Min.	Max.	Unit	Conditions
<b>V<sub>BR</sub></b>	Reverse Breakdown Voltage	100	-	V	I <sub>R</sub> =100μA
<b>I<sub>R</sub></b>	Leakage Current	-	1.0	μA	V <sub>R</sub> =50V
		-	3.0		V <sub>R</sub> =100V
		-	100		V <sub>R</sub> =50V, T <sub>j</sub> =125° C
<b>V<sub>F</sub></b>	Forward Voltage	0.55	0.70	V	I <sub>F</sub> =1mA
		0.67	0.82		I <sub>F</sub> =10mA
		0.75	1.10		I <sub>F</sub> =100mA
<b>C<sub>D</sub></b>	Diode Capacitance	-	1.5	pF	V <sub>R</sub> =0V, f=1MHz
<b>T<sub>rr</sub></b>	Reverse Recovery Time	-	4.0	nS	I <sub>F</sub> =10mA, I <sub>R</sub> =10mA, I <sub>rr</sub> =1mA, R <sub>L</sub> =100Ω

### Dimensions in inch (mm)

#### SOT-23



# Dual Small Signal Switching Diode

---

**MMBD7000**

## How to contact us:

### **US HEADQUARTERS**

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162  
Tel: (800) TAITRON (800) 824-8766 (661) 257-6060  
Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415  
Email: [taitron@taitroncomponents.com](mailto:taitron@taitroncomponents.com)  
Http://[www.taitroncomponents.com](http://www.taitroncomponents.com)

### **TAITRON COMPONENTS MEXICO, S.A .DE C.V.**

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P. 42970  
MEXICO  
Tel: +52-55-5560-1519  
Fax: +52-55-5560-2190

### **TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA**

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL  
Tel: +55-11-5574-7949  
Fax: +55-11-5572-0052

### **TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE**

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA  
Tel: +86-21-5424-9942  
Fax: +86-21-5424-9931

[www.s-manuals.com](http://www.s-manuals.com)