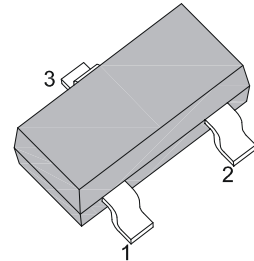


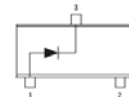
## Three Terminals SMD Switching Diode

### Features

- Fast switching speed
- Very fast reverse recovery time
- Low capacitance
- Surface mount package ideally suited for automatic insertion
- RoHS compliant



SOT-23



### Mechanical Data

<b>Case:</b>	SOT-23, Plastic Case
<b>Terminals:</b>	Solderable per MIL-STD-202G, Method 208
<b>Weight:</b>	Approx. 0.008 gram

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

Symbol	Description	MMBD914	Unit	Conditions
	Marking Code	5D / T1		
<b>V<sub>RM</sub></b>	Reverse Voltage	75	V	
<b>V<sub>RRM</sub></b>	Peak Reverse Voltage	100	V	
<b>I<sub>F(AV)</sub></b>	Forward Average Current	200	mA	
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	500	mA	
<b>P<sub>D</sub></b>	Power Dissipation	225	mW	Note
<b>R<sub>thJA</sub></b>	Thermal Resistance from Junction to Ambient	556	° C/W	
<b>T<sub>J</sub></b>	Junction Temperature	150	° C	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-55 to +150	° C	

**Note:** FR-5 Board=1.0"x0.75"x0.62".

# Three Terminals SMD Switching Diode

## MMBD914

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

Symbol	Description	Min.	Max.	Unit	Conditions
<b>V<sub>F</sub></b>	Forward Voltage	---	1.0	V	I <sub>F</sub> =10mA
<b>V<sub>BR</sub></b>	Reverse Breakdown Voltage	100	---	V	I <sub>R</sub> =100μA
<b>I<sub>R</sub></b>	Reverse Current	---	0.025	μA	V <sub>R</sub> =20V
		---	5.0		V <sub>R</sub> =75V
<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
<b>C<sub>D</sub></b>	Diode Capacitance	--	4.0	pF	V <sub>R</sub> =0V, f=1MHz

### Typical Characteristics Curves

Fig.1- Typical Instantaneous Forward Characteristics

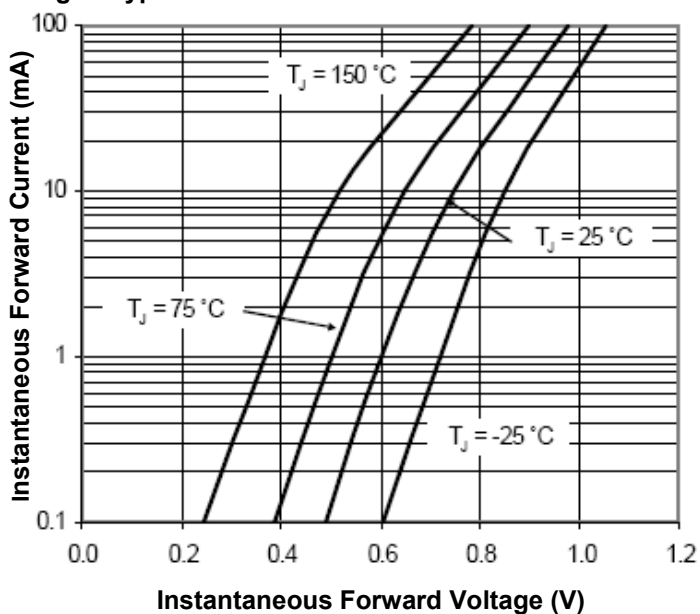
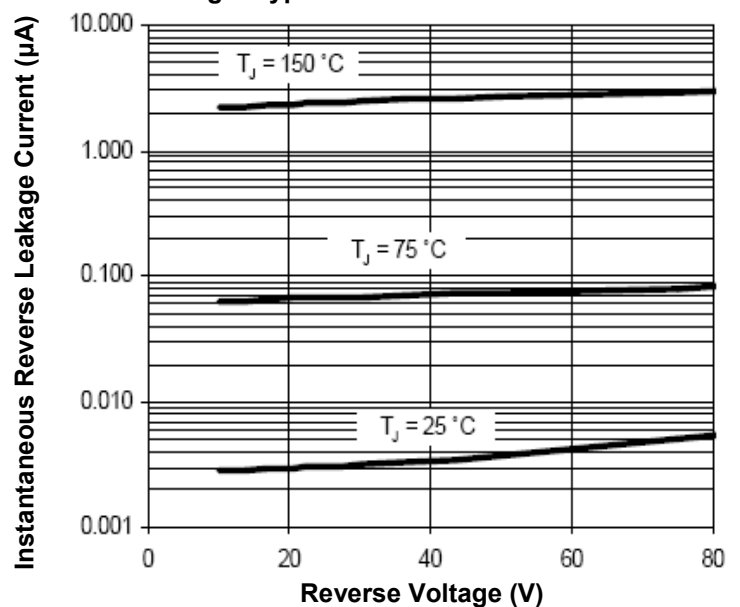


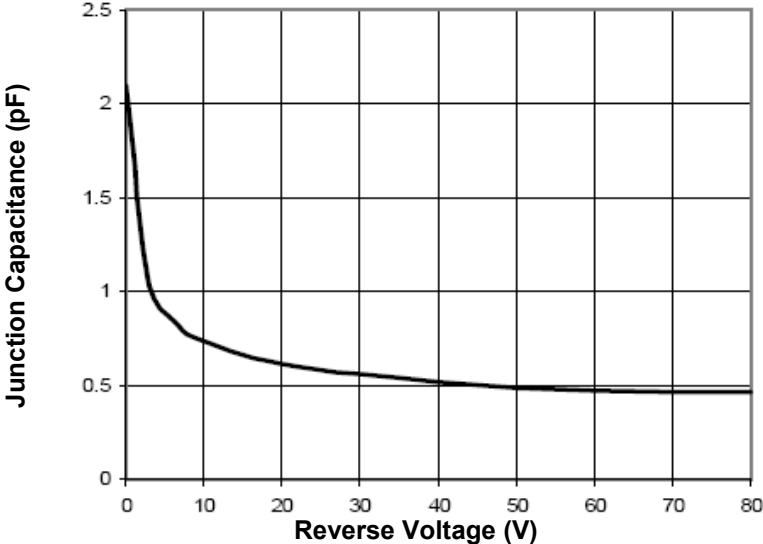
Fig.2-Typical Reverse Characteristics



# Three Terminals SMD Switching Diode

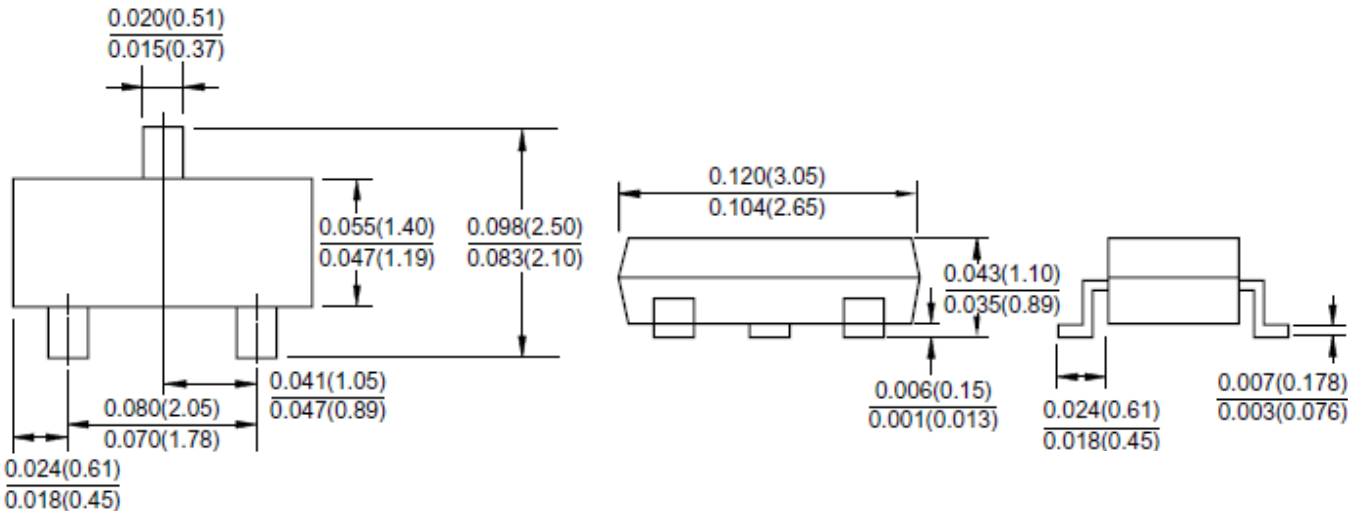
MMBD914

Fig.3- Typical Junction Capacitance



Dimensions in inch (mm)

SOT-23

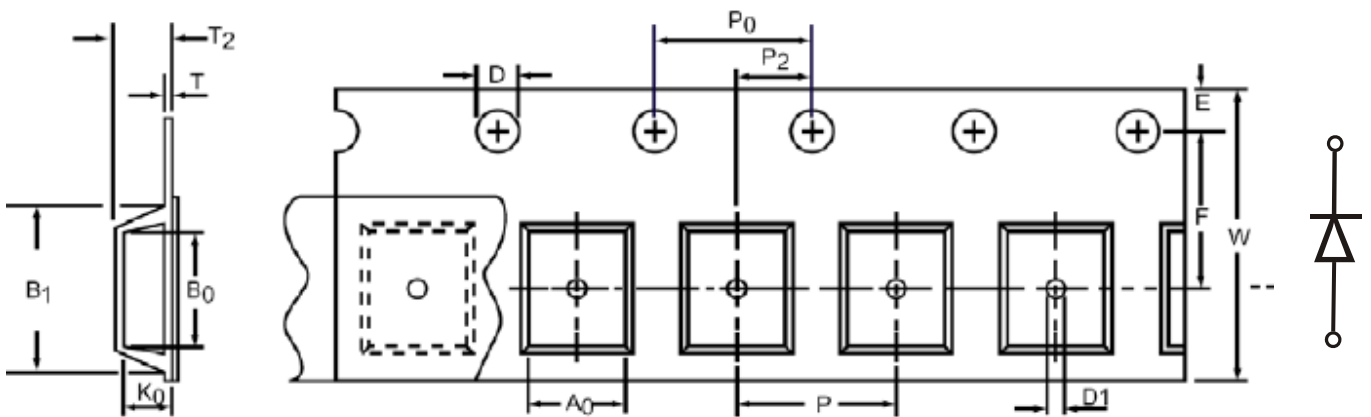


# Three Terminals SMD Switching Diode

MMBD914

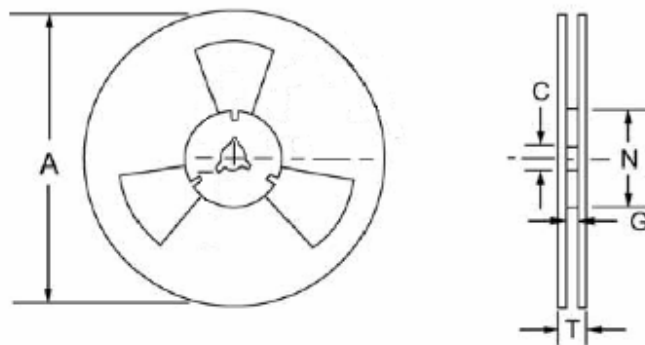
## Packing Information:

### Carrier Tape Dimensions (in mm)



Product Type	D	P0	P	W	E	A0	B0
		1.55±0.05	4.0±0.10	4.0±0.10	8.0+0.3/-0.1	1.75±0.10	3.15±0.10
SOT-23	B1	T	T2	D1	F	K0	P2
	4.0±0.10	0.20±0.05	1.4 max	1.0±0.05	3.5±0.05	1.0±0.10	2.0±0.05

### Reel Dimensions (in mm)



A	C	G	N	T
178.0	13.0+0.5/-0.2	9.9 max.	54.5±0.5	14.4 max.
330.0	13.0+0.5/-0.2	9.9 max.	100.0±0.5	14.4 max.

## Three Terminals SMD Switching Diode

# MMBD914

### Packing Quantity

Quantity	PCS per Reel	PCS per Inner Carton Box	PCS per Outer Carton Box
TR70 Tape & Reel	3,000	12,000	192,000
		51,000	408,000
TR30 Tape & Reel	10,000	10,000	300,000

### Carton Size Information: (in inch)

Size	PCS per Reel	Inner Carton Box Size	Outer Carton Box Size
TR70 Tape & Reel	3,000	3"x7.5"x7.5"	17"x15"x13.5"
		9"x9"x9"	19"x19"x19"
TR30 Tape & Reel	10,000	13"x13"x0.5"	17"x15"x13.5"

### 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