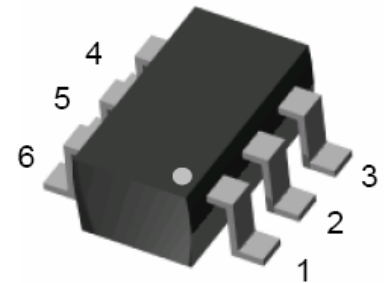


## Multiple Terminals SMD Switching Diode

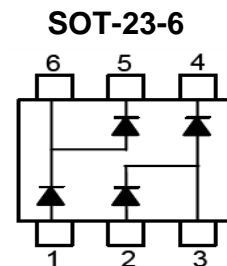
### Features

- High reverse voltage rating
- Fast switching speed
- Low capacitance
- RoHS compliant



### Mechanical Data

<b>Case:</b>	SOT-23-6, Plastic Case
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Solderable per MIL-STD-202, Method 208
<b>Weight:</b>	Approx. 0.016 gram



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

Symbol	Description	MMBD3004BRM	Unit	Conditions
	Marking Code	B34		
<b>V<sub>RM</sub></b>	Continuous Reverse Voltage	300	V	
<b>V<sub>RRM</sub></b>	Repetitive Peak Reverse Voltage	350	V	
<b>V<sub>RMS</sub></b>	RMS Reverse Voltage	212	V	
<b>I<sub>F(AV)</sub></b>	Continuous Forward Current	225	mA	Note 1
<b>I<sub>FRM</sub></b>	Peak Repetitive Forward Current	625	mA	
<b>I<sub>FSM</sub></b>	Non-Repetitive Peak Forward Surge Current, t=1S, Square Wave	1.0	A	
<b>P<sub>D</sub></b>	Total Power Dissipation	350	mW	Note 1
<b>R<sub>thJA</sub></b>	Thermal Resistance Junction to Ambient	357	° C/W	Note 1
<b>T<sub>J</sub>, T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-55 to +150	°C	

**Note:** 1. FR-5 Board 1.0x0.75x0.062"

# Multiple Terminals SMD Switching Diode

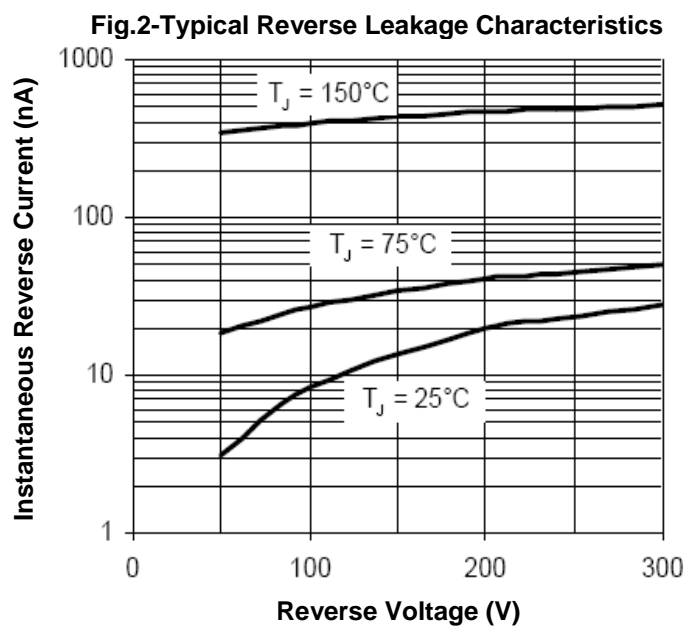
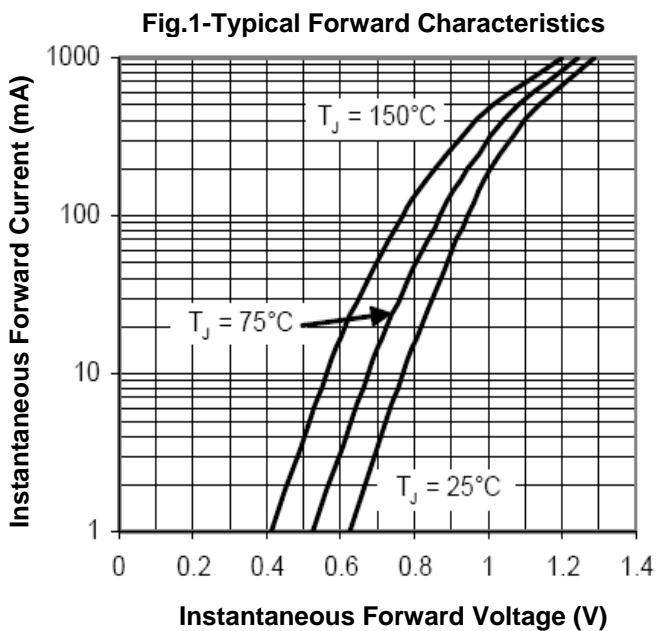
## MMBD3004BRM

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

Symbol	Description	Min.	Typ.	Max.	Unit	Conditions
<b>V<sub>BR</sub></b>	Breakdown Voltage (Note 2)	350	-	-	V	I <sub>BR</sub> =150μA
<b>V<sub>F</sub></b>	Forward Voltage (Note 2)	-	0.82	0.87	V	I <sub>F</sub> =20mA
		-	0.95	1.0		I <sub>F</sub> =100mA
		-	1.0	1.25		I <sub>F</sub> =200mA
<b>I<sub>R</sub></b>	Reverse Leakage Current (Note 2)	-	0.02	0.1	μA	V <sub>R</sub> =240V
		-	0.5	100		V <sub>R</sub> =240V, T <sub>J</sub> =150°C
<b>C<sub>J</sub></b>	Total Capacitance	-	1.7	5.0	pF	V <sub>R</sub> =0V, f=1MHz
<b>T<sub>rr</sub></b>	Reverse Recovery Time	-	-	50	ns	I <sub>F</sub> =I <sub>R</sub> =30mA, I <sub>RR</sub> =3mA, R <sub>L</sub> =100Ω

**Note:** 2.Short duration pulse test to avoid self-heating effect

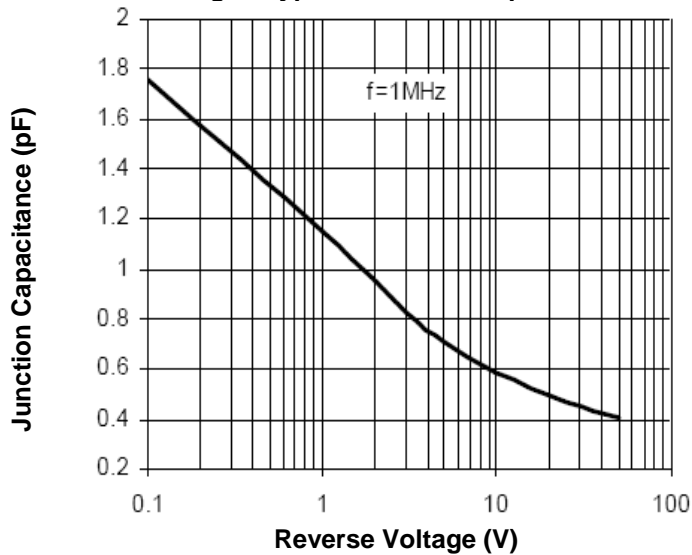
### Typical Characteristics Curves



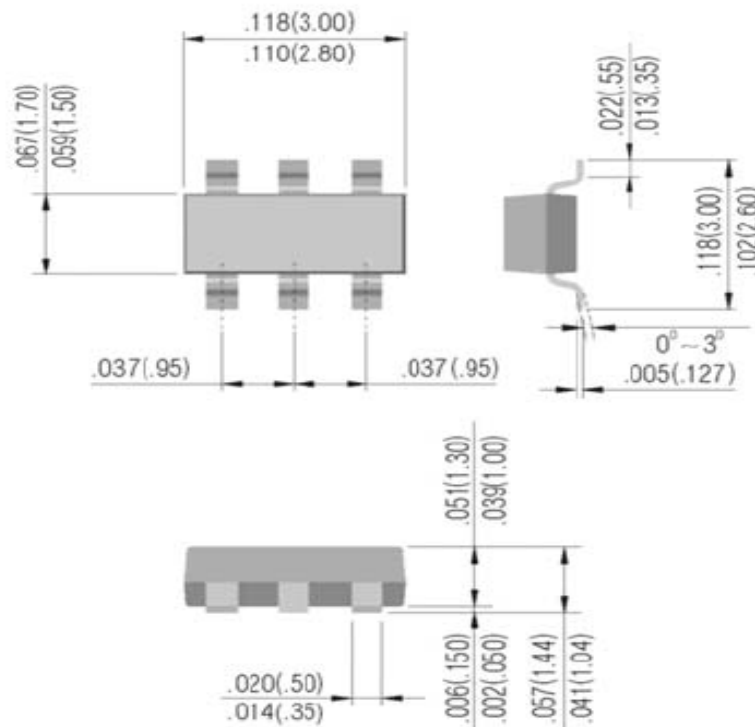
# Multiple Terminals SMD Switching Diode

## MMBD3004BRM

Fig.3- Typical Junction Capacitance



### Dimensions in inch (mm)



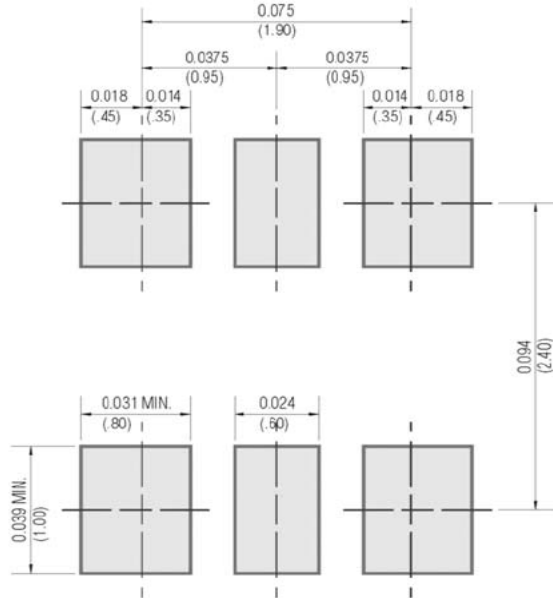
SOT-23-6

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components incorporated

# Multiple Terminals SMD Switching Diode

## MMBD3004BRM

### Mounting Pad Layout in inch (mm)



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