



## SOT-363 Plastic-Encapsulate Diodes

### MMBD4148TW

### SWITCHING DIODES

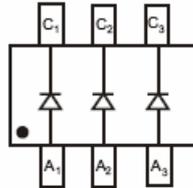
SOT-363



Moisture Sensitivity Level 1

#### FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



MARKING: MMBD4148TW KA2

#### Maximum Ratings @T<sub>A</sub>=25°C

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V <sub>RM</sub>	100	V
Peak Repetitive Peak reverse voltage	V <sub>RPM</sub>	75	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	53	V
Forward Continuous Current	I <sub>FM</sub>	300	mA
Average Rectified Output Current	I <sub>O</sub>	150	mA
Peak forward surge current @=1.0μs	I <sub>FSM</sub>	2.0	A
@=1.0s		1.0	
Power Dissipation	P <sub>d</sub>	200	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	625	K/W
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>STG</sub>	-65~+150	°C

#### Electrical Ratings @T<sub>A</sub>=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	75			V	I <sub>R</sub> =10μA
Forward voltage	V <sub>F1</sub>			0.715	V	I <sub>F</sub> =1mA
	V <sub>F2</sub>			0.855	V	I <sub>F</sub> =10mA
	V <sub>F3</sub>			1.0	V	I <sub>F</sub> =50mA
	V <sub>F4</sub>			1.25	V	I <sub>F</sub> =150mA
Reverse current	I <sub>R1</sub>			1	μA	V <sub>R</sub> =75V
	I <sub>R2</sub>			25	nA	V <sub>R</sub> =20V
Capacitance between terminals	C <sub>T</sub>			2	pF	V <sub>R</sub> =0V, f=1MHz
Reverse Recovery Time	t <sub>rr</sub>			4	ns	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1I <sub>R</sub> , R <sub>L</sub> =100Ω



### SOT-363 Plastic-Encapsulate Diodes

#### Typical Characteristics

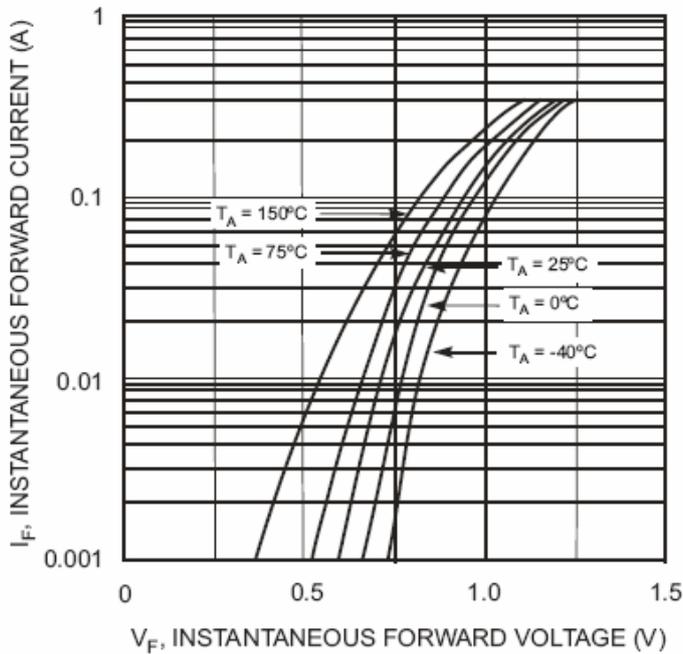


Fig. 2 Forward Characteristics

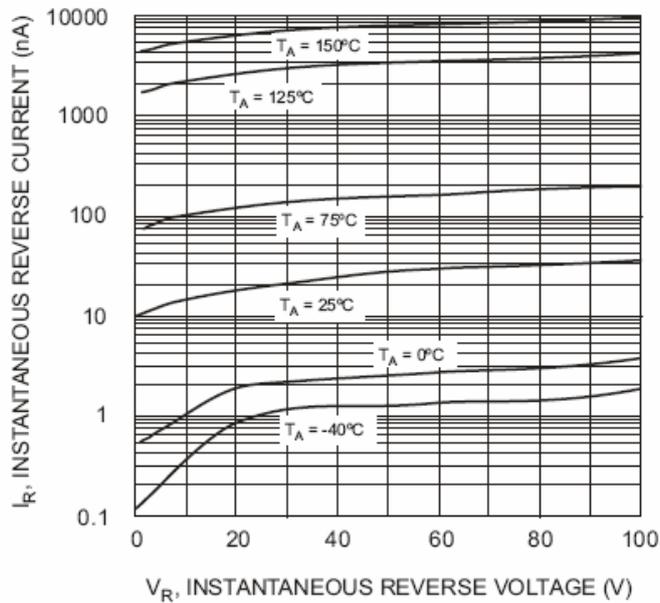


Fig. 3 Typical Reverse Characteristics

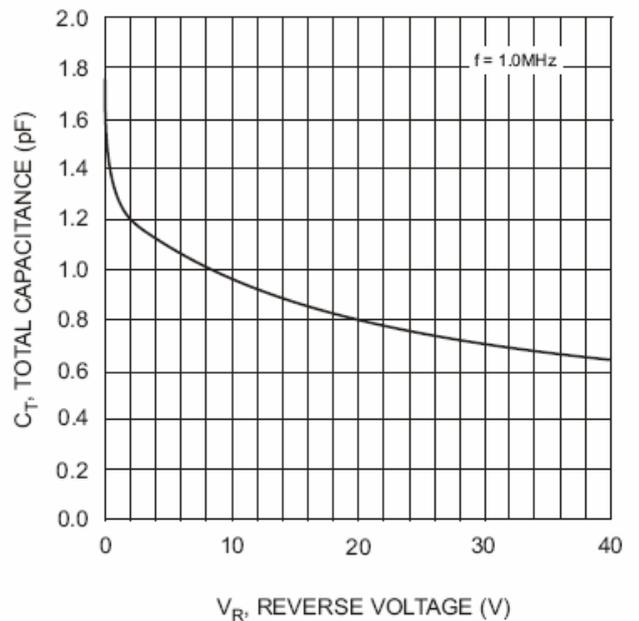
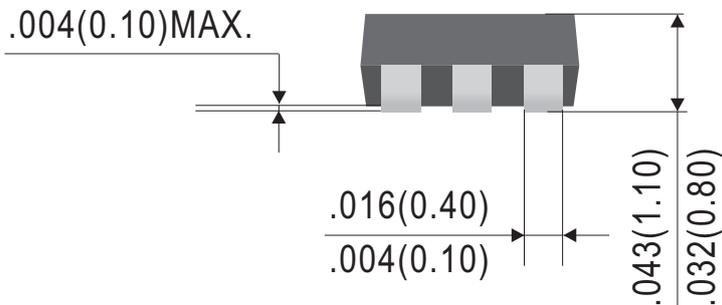
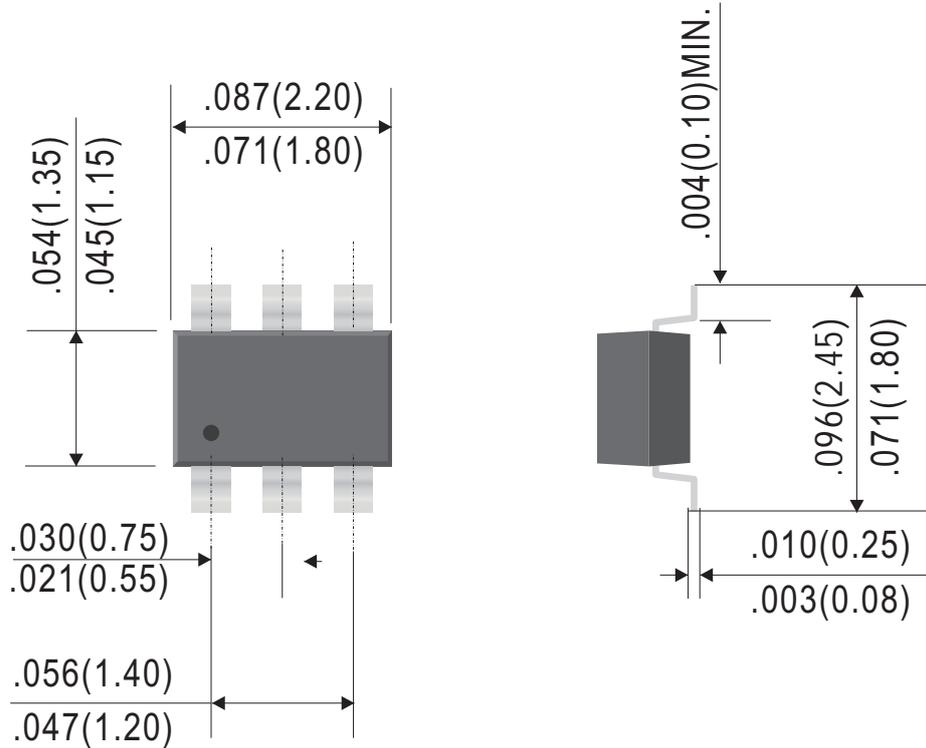


Fig. 4 Typical Capacitance vs. Reverse Voltage

**SOT-363 Plastic-Encapsulate Diodes**

**Outline Drawing**

**SOT-363**



Dimensions in inches and (millimeters)



# WILLAS



**MMBD4148HK**

## SOT-363 Plastic-Encapsulate Diodes

### Ordering Information:

Device PN	Packing
MMBD4148TW-T <sup>(1)</sup> G <sup>(2)</sup> -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code,Reel Packing ; CASE: SOT-363

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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