

## Switching Diodes

## MMBD4448DW (KMBD4448DW)

## ■ Features

- Fast Switching Speed
- For General Purpose Switching Applications.
- High Conductance
- Ultra-Small Surface Mount Package

## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	75	
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	53	mA
Average Rectified Output Current	I <sub>O</sub>	250	
Forward Continuous Current	I <sub>FM</sub>	500	A
Peak Forward Surge Current @ t=1.0us	I <sub>FSM</sub>	4	
@t=1s		1.5	
Power Dissipation	P <sub>d</sub>	200	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	625	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>R</sub>	I <sub>R</sub> = 100 uA	75			V
Forward voltage	V <sub>F1</sub>	I <sub>F</sub> = 5mA	0.62		0.72	
	V <sub>F2</sub>	I <sub>F</sub> = 10 mA			0.855	
	V <sub>F3</sub>	I <sub>F</sub> = 50 mA			1	
	V <sub>F4</sub>	I <sub>F</sub> = 150 mA			1.25	
Reverse voltage leakage current	I <sub>R1</sub>	V <sub>R</sub> = 75 V			2.5	uA
	I <sub>R2</sub>	V <sub>R</sub> = 75 V, T <sub>J</sub> = 150°C			50	
	I <sub>R3</sub>	V <sub>R</sub> = 25V, T <sub>J</sub> = 150°C			30	nA
	I <sub>R4</sub>	V <sub>R</sub> =20 V			25	
Junction capacitance	C <sub>j</sub>	V <sub>R</sub> = 0 V, f= 1 MHz			4	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =0.1xI <sub>R</sub> , R <sub>L</sub> =100Ω			4	ns

## ■ Marking

Marking	KA3
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