

Switching Diodes

MMBD4448DW (KMBD4448DW)

■ Features

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

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100\mu\text{A}$	75			V
Forward voltage	V_{F1}	$I_F = 5\text{mA}$	0.62		0.72	
	V_{F2}	$I_F = 10\text{mA}$			0.855	
	V_{F3}	$I_F = 50\text{mA}$			1	
	V_{F4}	$I_F = 150\text{mA}$			1.25	
Reverse voltage leakage current	I_{R1}	$V_R = 75\text{V}$			2.5	μA
	I_{R2}	$V_R = 75\text{V}, T_J = 150^\circ\text{C}$			50	
	I_{R3}	$V_R = 25\text{V}, T_J = 150^\circ\text{C}$			30	nA
	I_{R4}	$V_R = 20\text{V}$			25	
Junction capacitance	C_j	$V_R = 0\text{V}, f = 1\text{MHz}$			4	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1I_R, R_L = 100\Omega$			4	ns

■ Marking

Marking	KA3
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