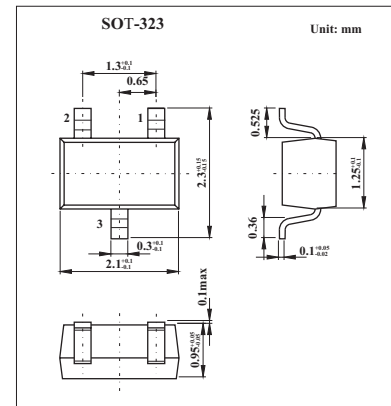


## Surface Mount Fast Switching Diodes

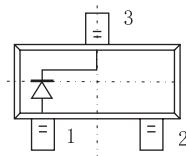
## MMBD4448W

## ■ Features

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



## ■ PIN Array

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

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	$I_{FM}$	500	mA
Average Rectified Output Current	$I_o$	250	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0 \mu\text{s}$ @ $t = 1.0\text{s}$	$I_{FSM}$	4.0	A
		2.0	
Power Dissipation	$P_D$	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150	$^\circ\text{C}$

**MMBD4448W**■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage (*)	$V_{(BR)R}$	$I_R = 10 \mu\text{A}$	75			V
Forward Voltage (*)	$V_F$	$I_F = 5.0\text{mA}$	0.62	0.72		V
		$I_F = 10\text{mA}$		0.855		
		$I_F = 100\text{mA}$		1.0		
		$I_F = 150\text{mA}$		1.25		
Leakage Current (*)	$I_R$	$V_R = 75\text{V}$		2.5		$\mu\text{A}$
		$V_R = 75\text{V}, T_j = 150^\circ\text{C}$		50		
		$V_R = 25\text{V}, T_j = 150^\circ\text{C}$		30		
		$V_R = 20\text{V}$		25		nA
Total Capacitance	$C_T$	$V_R = 0, f = 1.0\text{MHz}$		4.0		pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 10\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$		4.0		ns

\* Short duration test pulse used to minimize self-heating effect.

## ■ Marking

Marking	KA3
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