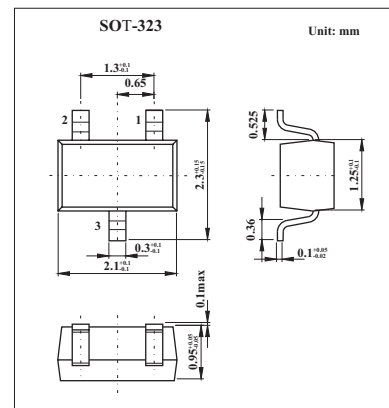


Surface Mount Switching Diodes

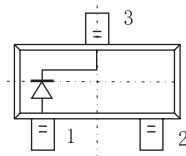
MMBD4448HW

■ Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- 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}		
Working Peak Reverse Voltage	V_{RWM}	80	V
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	57	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Output Current	I_o	250	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0 \mu\text{s}$	I_{FSM}	4.0	A
@ $t = 1.0\text{s}$		2.0	
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	$^\circ\text{C}$

MMBD4448HW■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage (*)	$V_{(BR)R}$	$I_R = 2.5 \mu\text{A}$	80			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		
Reverse Current (*)	I_R	$V_R = 75\text{V}$		100		nA
		$V_R = 75\text{V}, T_j = 150^\circ\text{C}$		50		μA
		$V_R = 25\text{V}, T_j = 150^\circ\text{C}$		30		μA
		$V_R = 20\text{V}$		25		nA
Total Capacitance	C_T	$V_R = 6\text{V}, f = 1.0\text{MHz}$		3.5		pF
Reverse Recovery Time	t_{rr}	$V_R = 6\text{V}, I_F = 5\text{mA}$		4.0		ns

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

■ Marking

Marking	KA1
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