

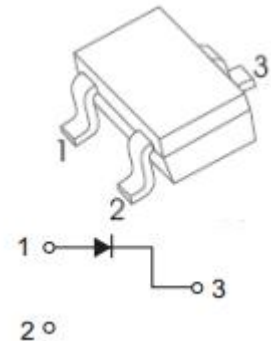
MMBD4448W SWITCHING DIODE

Features:

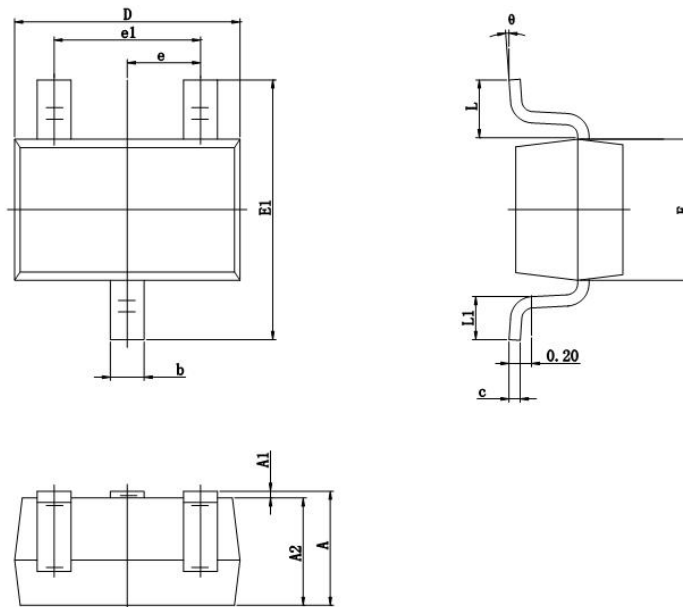
- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications
- High conductance

Mechanical Data:

- Case: SOT-323, Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: Polarity symbols marked on case
- Marking: KA3



Mechanical Dimensions: In Inches / mm



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-323

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

Ordering Information:

Device	Package	Shipping
MMBD4448W	SOT-323(Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

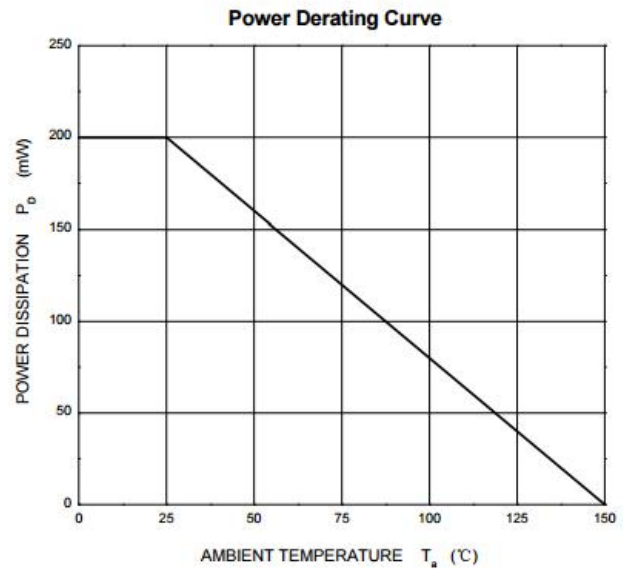
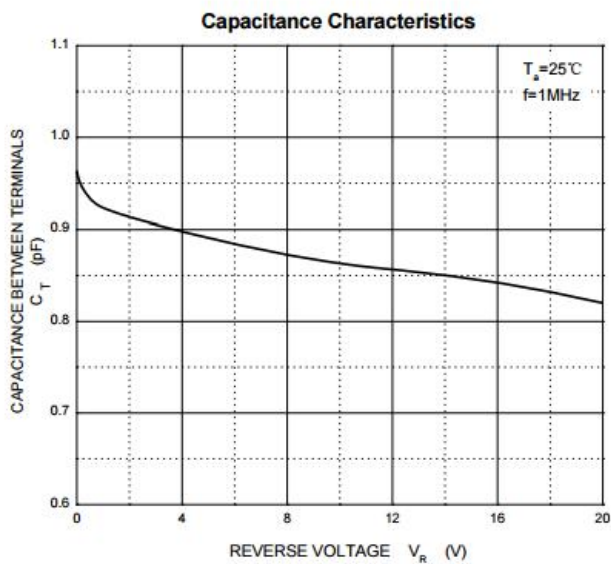
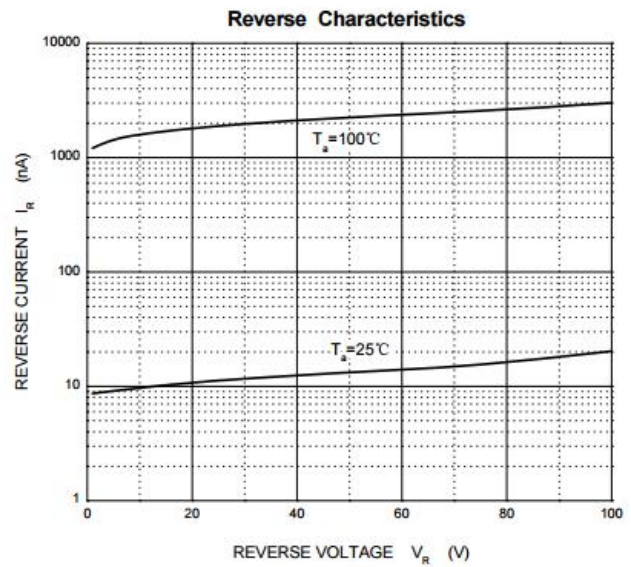
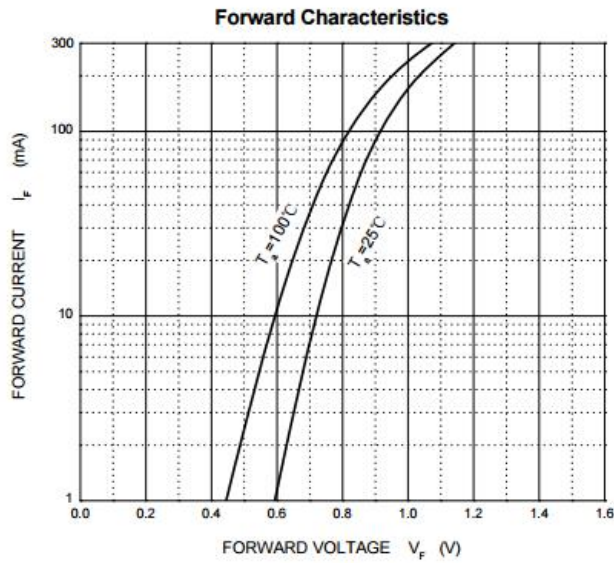
Maximum Ratings @Ta=25°C

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
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=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	625	°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

Electrical Characteristics @Ta=25°C

Characteristics	Symbol	Condition	Min.	Max.	Units
Forward Voltage Drop	V_{F1}	@ 5mA, Pulse, $T_J = 25^\circ\text{C}$ @ 10mA, Pulse, $T_J = 25^\circ\text{C}$ @ 100mA, Pulse, $T_J = 25^\circ\text{C}$ @ 150mA, Pulse, $T_J = 25^\circ\text{C}$	0.62	0.72 0.855 1.0 1.25	V
Reverse Current	I_{R1}	@ $V_R = 75\text{V}$, Pulse, $T_J = 25^\circ\text{C}$		2.5	μA
	I_{R2}	@ $V_R = 20\text{V}$, Pulse, $T_J = 25^\circ\text{C}$		25	nA
Capacitance between terminals	C_T	@ $V_R = 0\text{V}$, $T_c = 25^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$		4	pF
Reverse Recovery Time	t_{rr}	$I_F = 10\text{mA}$ $I_R = 10\text{mA}$ $T_J = 25^\circ\text{C}$ $I_{rr} = 1\text{mA}$ $R_L = 100\Omega$		4	ns

Typical Characteristics



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