

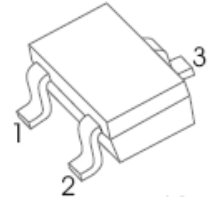
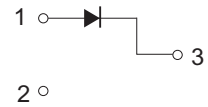


### MMBD4448W SWITCHING DIODE

#### FEATURES

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

MARKING: KA3



SOT- 323

#### Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Peak 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=8.3ms	$I_{FSM}$	2.0	A
Power Dissipation	$P_d$	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W
Storage Temperature	$T_{STG}$	-55 ~+150	°C

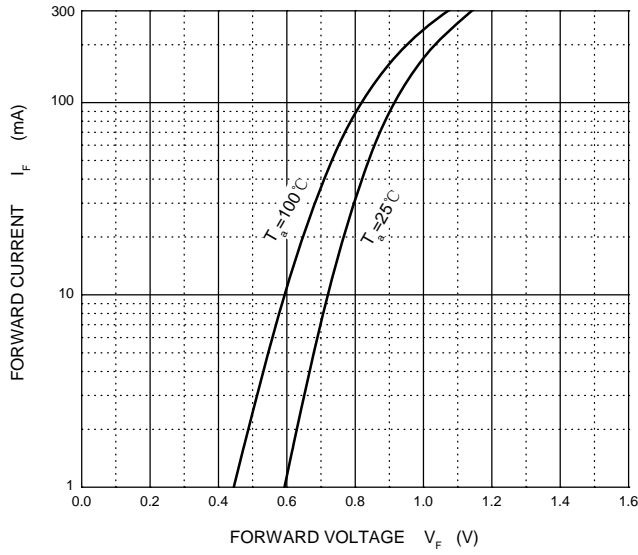
#### Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	$V_{F1}$	0.62		0.72	V	$I_F=5mA$
	$V_{F2}$			0.855	V	$I_F=10mA$
	$V_{F3}$			1.0	V	$I_F=100mA$
	$V_{F4}$			1.25	V	$I_F=150mA$
Reverse current	$I_{R1}$			2.5	$\mu A$	$V_R=75V$
	$I_{R2}$			25	nA	$V_R=20V$
Capacitance between terminals	$C_T$			4	pF	$V_R=0V, f=1MHz$
Reverse recovery time	$t_{rr}$			4	ns	$I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

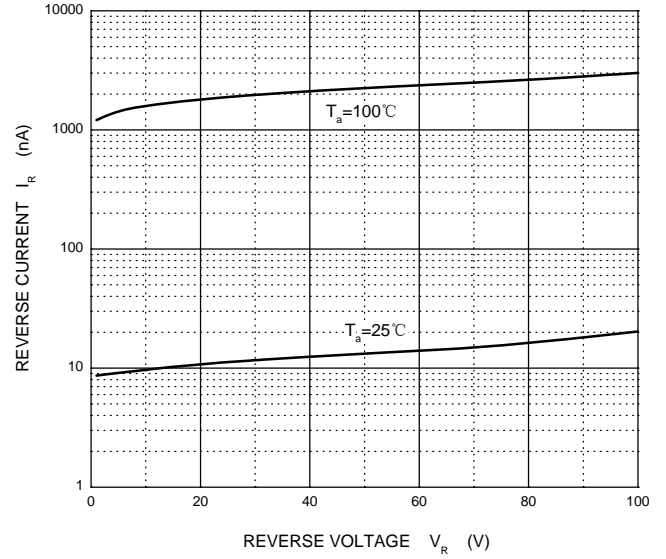


## Typical Characteristics

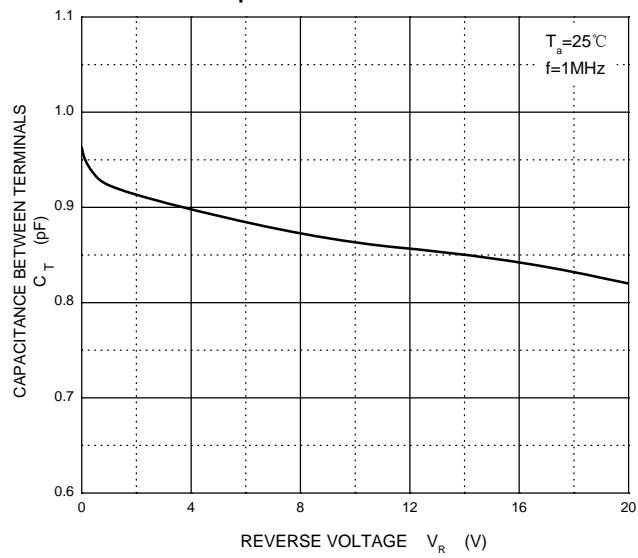
### Forward Characteristics



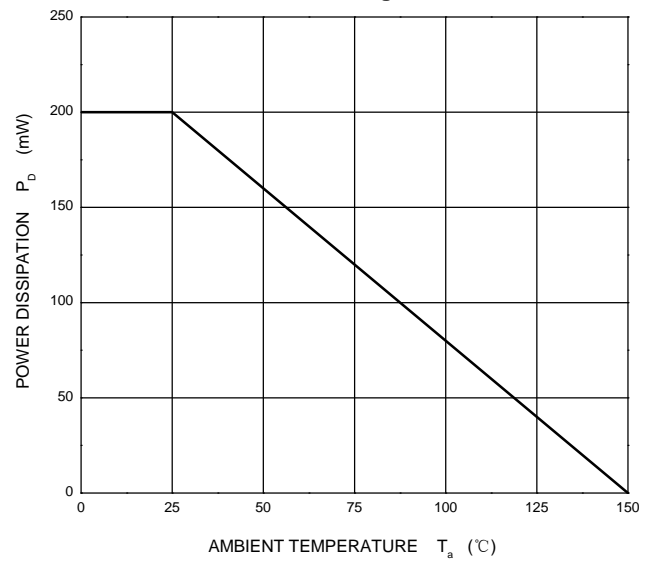
### Reverse Characteristics



### Capacitance Characteristics

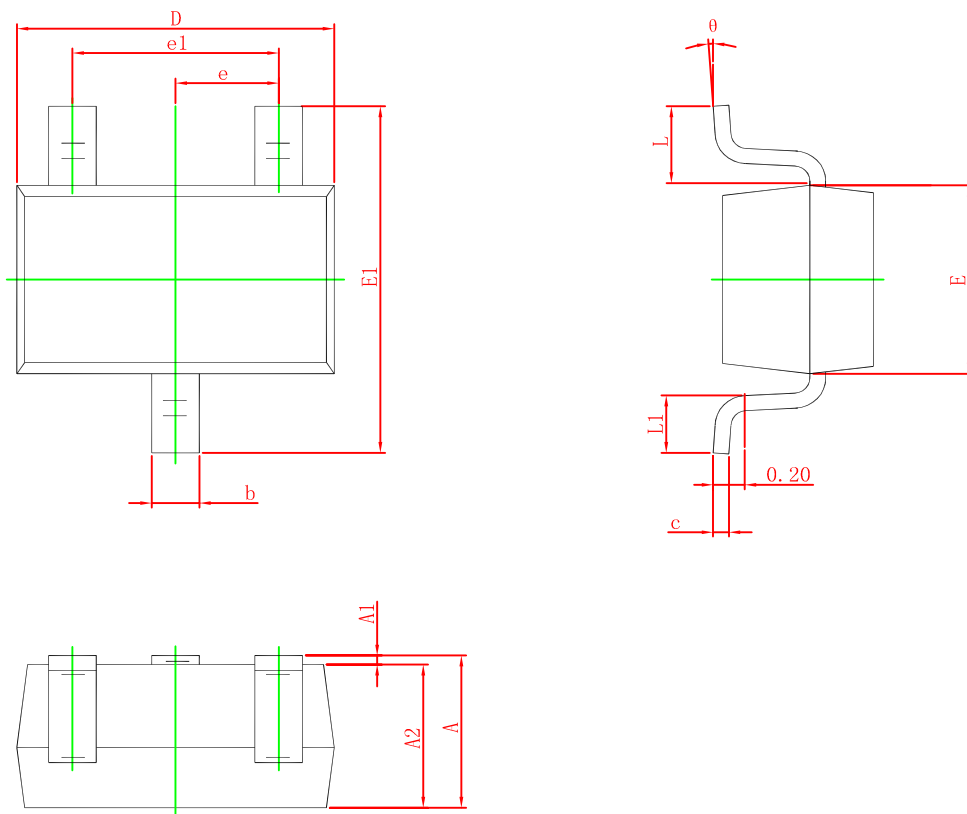


### Power Derating Curve





### SOT-323 PACKAGE OUTLINE DIMENSIONS



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
theta	0°	8°	0°	8°