DATA SHEET

SEMICONDUCTOR

MMBD4448W

SOT-323 Plastic-Encapsulate DIODE
SWITCHING DIODE

SOT323 Unit:inch(mm)

FEATURES

Power dissipation

PD: 200 mW (Tamb=25°C)

Collector current

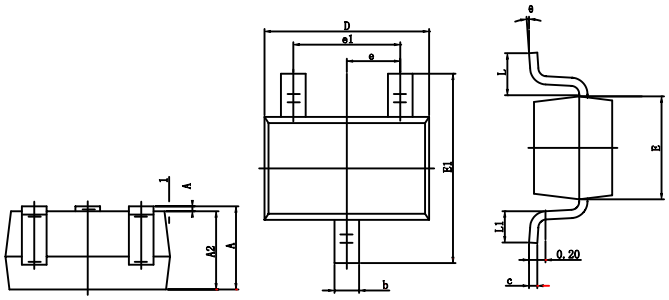
IO: 250 mA

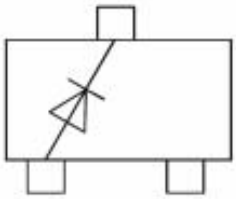
Collector-base voltage

VR: 75 V

Operating and storage junction temperature range

TJ, Tstg: -55°C to +150°C





Marking: KA3

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°

High temperature soldering : 260°C / 10 seconds at terminals

Pb free product at available : 99% Sn above meet RoHS environment substance directive request

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbo	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	V(BR) R	IR= 10μA	75		V
Reverse voltage leakage current	IR	VR=20V		0.025	μA
		VR=75V		2.5	
Forward voltage	VF	IF=5mA		0.72	V
		IF=10mA		0.855	
		IF=100mA		1	
		IF=150mA		1.25	
Diode capacitance	CD	VR=0V, f=1MHz		4	pF
Reverse recovery time	trr	IF=IR=10mA		4	nS
		Irr=0.1×IR ,RL=100Ω			

DEVICE CHARACTERISTICS

MMBD4448W

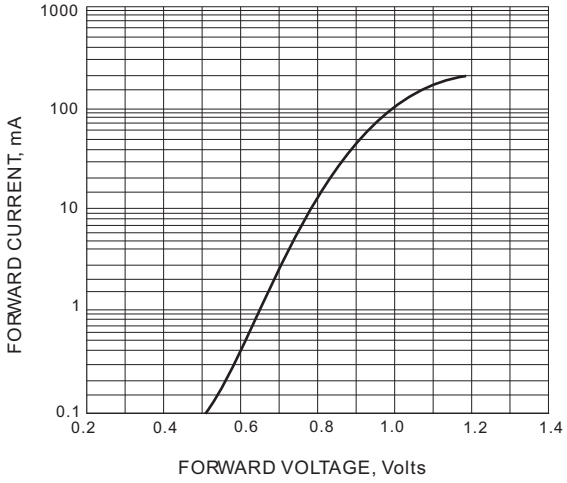


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

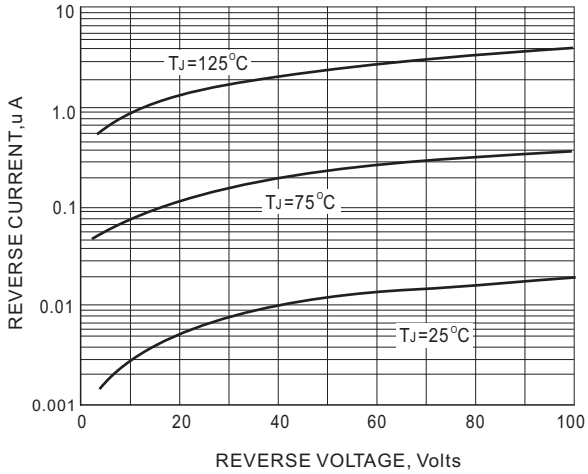


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

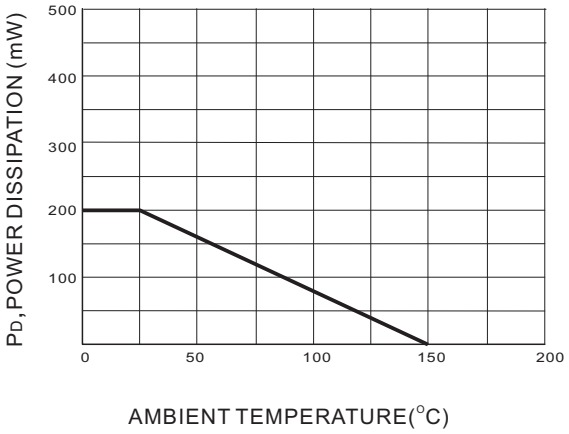


FIG. 3 POWER DERATING CURVE