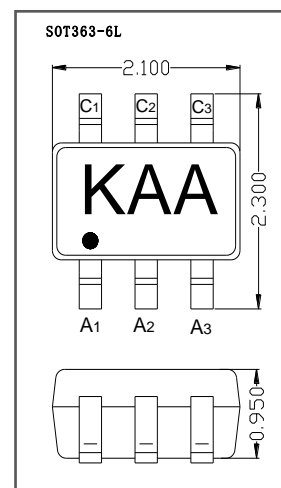
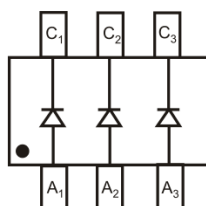


# Switching Diode

- ◇Epoxy Meets UL 94 V-0 Flammability Rating
- ◇Lead Free Finish/Rohs Compliant
- ◇For Switching Applications
- ◇Rugged And Reliable

Device Marking Code	
MMBD4448HTW	KAA

Equivalent Circuit



## MAXIMUM RATINGS (Ta = 25 °C)

Symbol	Parameter	Value	Units
V <sub>RM</sub>	Non-Repetitive Peak Reverse Voltage	100	V
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage	80	V
I <sub>FRM</sub>	Repetitive Peak Forward Current	500	mA
I <sub>O</sub>	Continuous Forward Current	250	mA
I <sub>FSM</sub>	Non-Repetitive Peak Forward Surge Current @t=1uS @t=1.0S	4.0	A
		1.5	
P <sub>d</sub>	Power Dissipation	200	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-65 to 150	°C
R <sub>θJA</sub>	Thermal Resistance From Junction To Ambient	625	°C/W

## ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
V <sub>BR</sub>	Reverse Breakdown Voltage	I <sub>R</sub> =100uA	80			V
I <sub>R</sub>	Reverse Voltage Leakage Current	V <sub>R</sub> =20V			25	nA
		V <sub>R</sub> =70V			100	nA
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> =5mA	0.62		0.72	V
		I <sub>F</sub> =10mA			0.855	V
		I <sub>F</sub> =50mA			1.0	V
		I <sub>F</sub> =150mA			1.25	V
C <sub>D</sub>	Diode Capacitance	V <sub>R</sub> =6.0V, f=1MHz			3.5	pF
t <sub>rr</sub>	Reverse Recovery Time	I <sub>F</sub> =5mA, V <sub>R</sub> =6V			4.0	nS

# RATING AND CHARACTERISTICS CURVES (MMBD4448HTW)

Fig. 1 - Typical Instantaneous Forward Characteristics

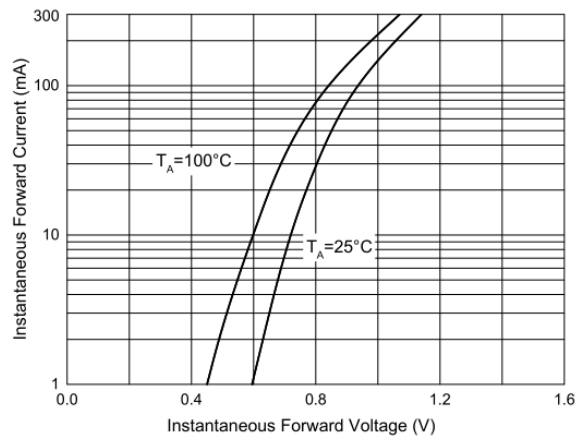


Fig. 2 - Typical Reverse Leakage Characteristics

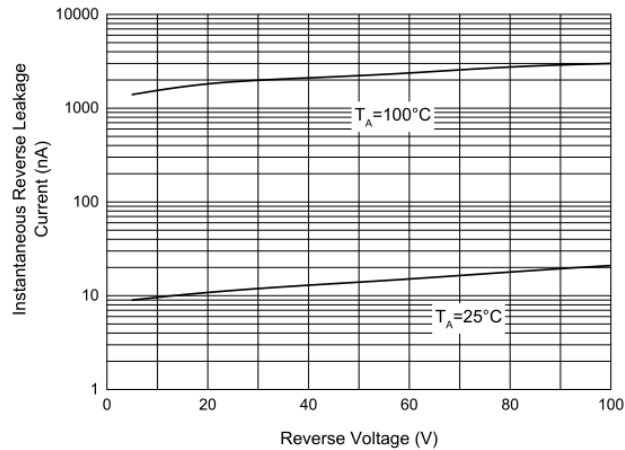
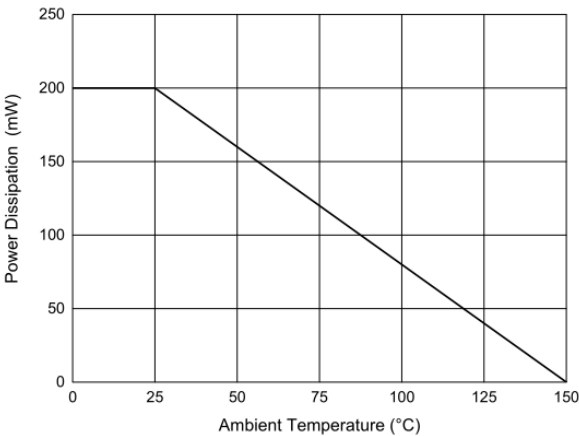


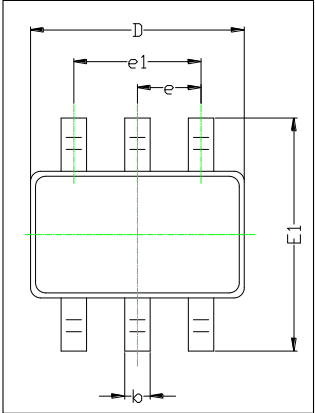
Fig. 3 - Power Derating Curve



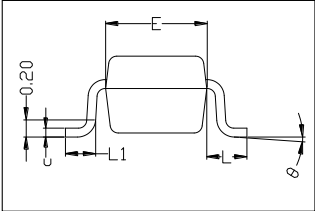
PACKAGE DIMENSIONS

Package outline : SOT363-6L

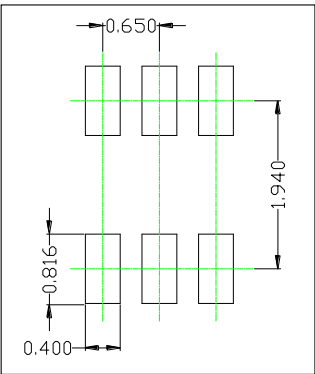
TOP VIEW



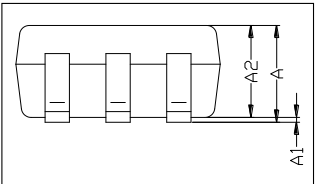
SIDE VIEW



SOLDING PATTERN



FRONT VIEW



SYMBOL	DIMENSIONS IN MILLIMETER	
	MIN	MAX
A	0.900	1.000
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.100	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.400
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
θ	0°	8°

- Notice:
- 1. Lead plating: Pb free solder
  - 2. Lead thickness includes solder plating
  - 3. Lead frame: CAC-5
  - 4. Other Tolerance: ±0.05
  - 6. Dimensions are exclusive of Burrs, Mold Flash and Tie Bar extrusions
  - 5. Unit: mm

ORDERING INFORMATION

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Package Code
MMBD4448HTW	SOT363-6L	Tape & Reel 3000pcs /7" Reel	8mm	4mm	Conductive	-T

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