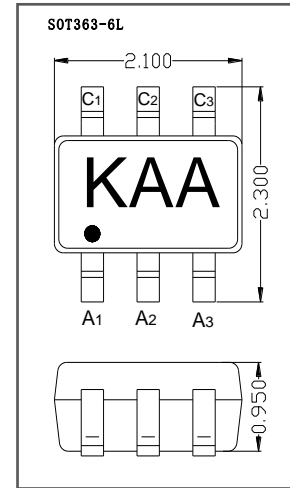
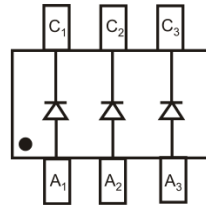


Switching Diode

- ◇ 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 _{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V _{RRM}	Repetitive Peak Reverse Voltage	80	V
I _{FRM}	Repetitive Peak Forward Current	500	mA
I _O	Continuous Forward Current	250	mA
I _{FSM}	Non-Repetitive Peak Forward Surge Current @t=1uS @t=1.0S	4.0	A
		1.5	
P _d	Power Dissipation	200	mW
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-65 to 150	°C
R _{θJA}	Thermal Resistance From Junction To Ambient	625	°C/W

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

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

RATING AND CHARACTERISTICS CURVES (MMBD4448HTW)

Fig. 1 - Typical Instantaneous Forward Characteristics

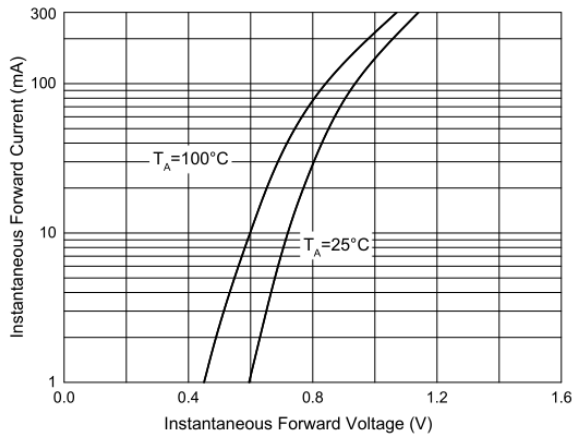


Fig. 2 - Typical Reverse Leakage Characteristics

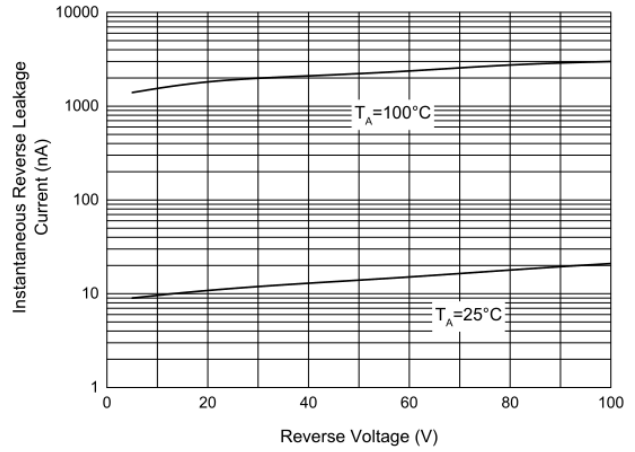
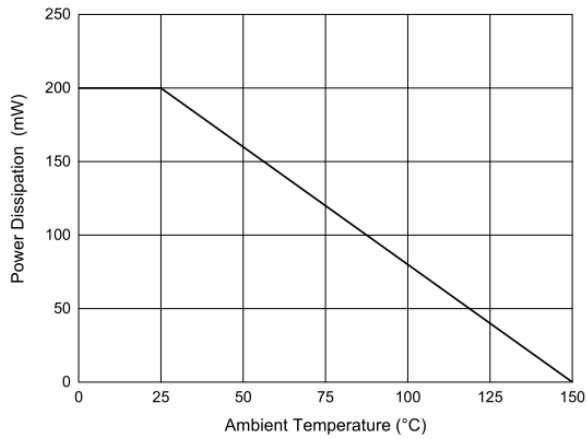


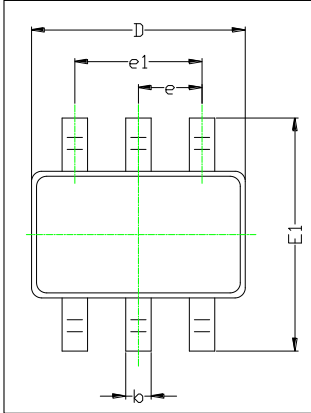
Fig. 3 - Power Derating Curve



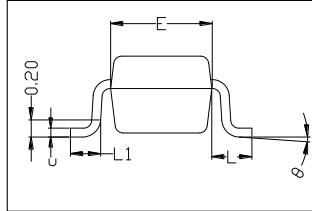
PACKAGE DIMENSIONS

Package outline : SOT363-6L

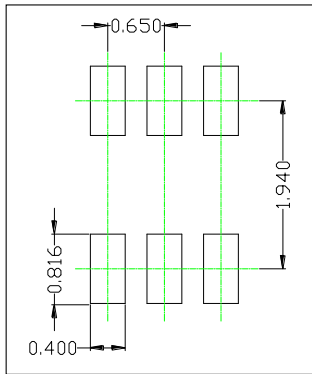
TOP VIEW



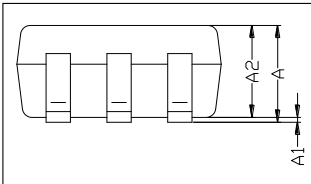
SIDE VIEW



SOLDERING 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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