WEITRON

MMBD4448HAQW MMBD4448HSDW
MMBD4448HADW MMBD4448HTW
MMBD4448HCDW

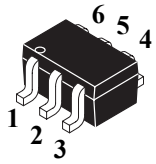
Surface Mount Switching Multi-Chip Diode Array

Lead(Pb)-Free

MULTI-CHIP DIODES
500m AMPERES
100 VOLTS

Features:

* Fast Switching Speed
* Ultra-Small Surface Mount Package
* For General Purpose Switching Applications
* High Conductance Power Dissipation



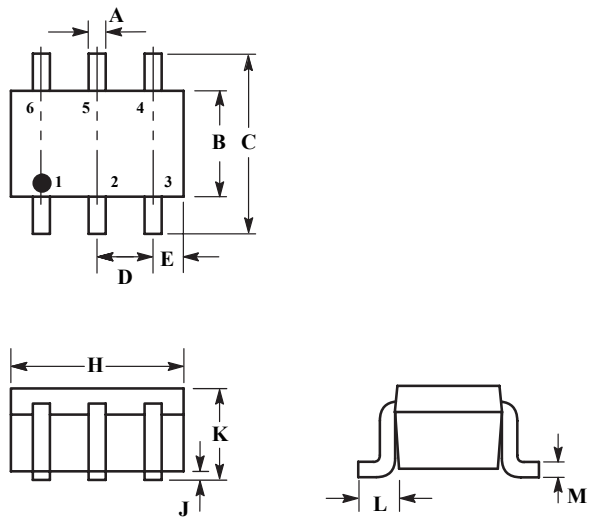
SOT-363

Mechanical Data:

* Case : SOT-363
* Case Material : Molded Plastic. UL Flammability Classification Ration 94V-0
* Moisture Sensitivity : Level 1 per J-STD-020C
* Terminals : Solderable per MIL-STD-202, Method 208
* Polarity : See Diagram
* Weight : 0.006 grams(appro)

SOT-363 Outline Dimensions

Unit:mm



SOT-363		
Dim	**Min**	**Max**
A	0.10	0.30
B	1.15	1.35
C	2.00	2.20
D	0.65 REF	
E	0.30	0.40
H	1.80	2.20
J	-	0.10
K	0.80	1.10
L	0.25	0.40
M	0.10	0.25

Maximum Ratings@ T_A= 25°C unless otherwise specified

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	80	V
RMS Reverse Voltage	$V_{R(RMS)}$	57	V
Forward Continuous Current (Note 1)	I_{FM}	500	mA
Average Rectified Output Current (Note 1)	I_O	250	mA
Non-Repetitive Peak Forward Surge Current@ t = 1.0μs @ t = 1.0s	I_{FSM}	4.0 2.0	A
Power Dissipation (Note 1)	P_D	200	mW
Thermal Resistant Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625	°C/W
Operating Temperature Range	T_j	+150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

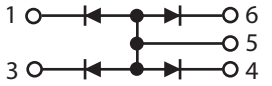
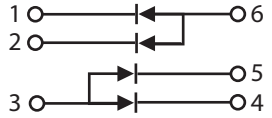
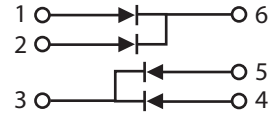
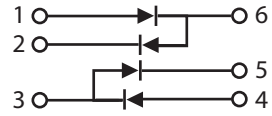
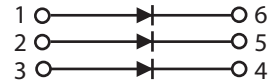
Notes:1. Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage (Note 2) I_R = 100μA	$V_{(BR)R}$	80	-	V
Forward Voltage (Note 2) IF = 5.0mA IF = 10mA IF = 100mA IF = 150mA	V_F	0.62 - - -	0.72 0.855 1.0 1.25	V
Reverse Current (Note 2) VR = 70V VR = 75V, Tj = 150°C VR = 25V, Tj = 150°C VR = 20V	I_R	-	100 50 30 25	nA μA μA nA
Total Capacitance VR = 6V, f = 1.0MHz	C_T	-	3.5	pF
Reverse Recovery Time VR = 6V, IF= 5mA	T_{rr}	-	4.0	ns

Notes:2. Short duration test pulse used to minimize self-heating effect.

Device Marking

Item	Marking	Eqivalent Circuit diagram
MMBD4448HAQW	KA5	
MMBD4448HADW	KA6	
MMBD4448HCDW	KA7	
MMBD4448HSDW	KAB	
MMBD4448HTW	KAA	

Typical Characteristics

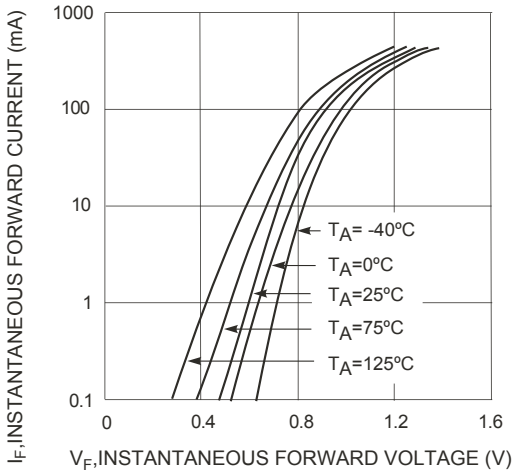


Fig.1 Typical Forward Characteristics

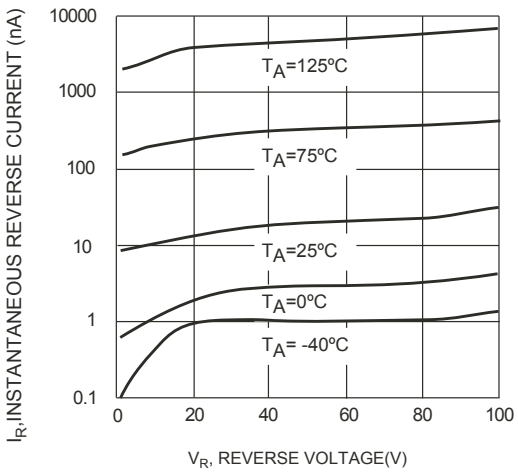


Fig.2 Typical Reverse Characteristics

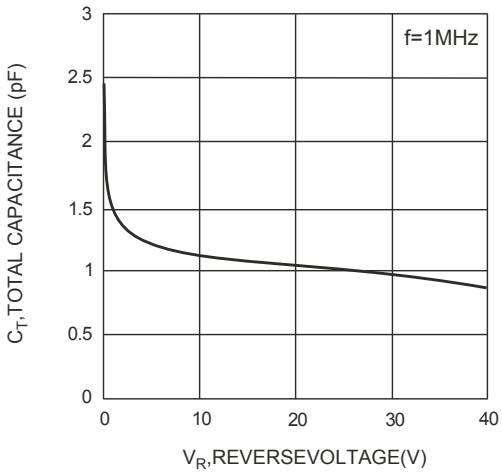


Fig.3 Typical Capacitancevs .Reverse Voltage

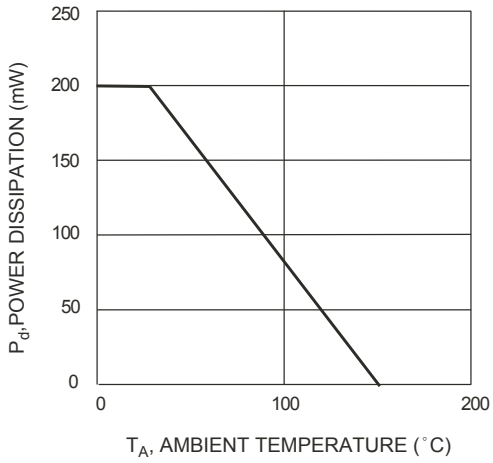


Fig.4 Power Derating Curve, Total Package

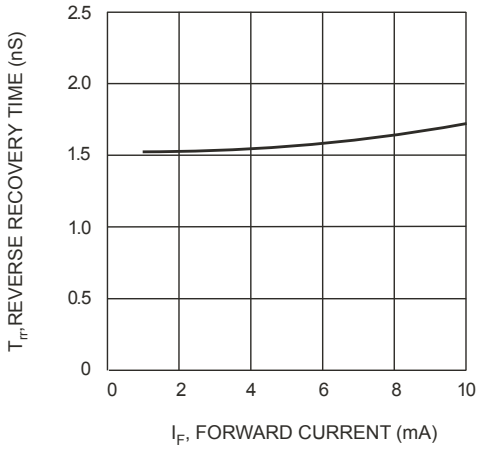


Fig.5 Reverse Recovery Time vs Forward Current