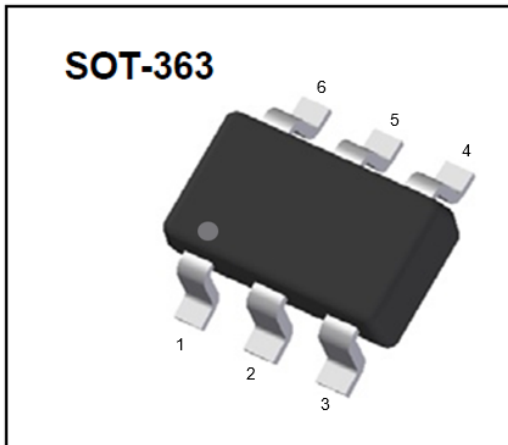




## Switching Diodes



### Features

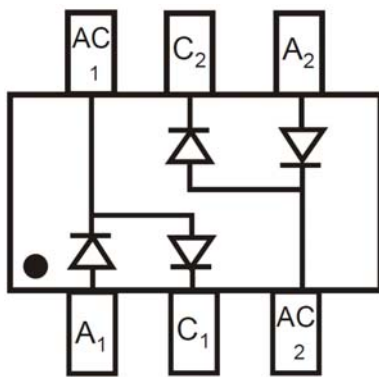
- Epoxy meets UL-94 V-0 flammability rating
- Surface mount package ideally Suited for Automatic Insertion
- Moisture Sensitivity Level 1

### Mechanical Data

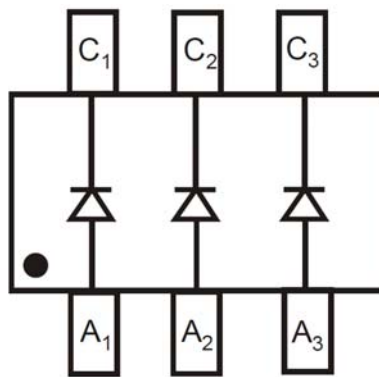
- **Package:** SOT-363
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:**

MMBD4448HSDW	KAB
MMBD4448HTW	KAA
MMBD4448HAQW	KA5
MMBD4448HADW	KA6
MMBD4448HCDW	KA7

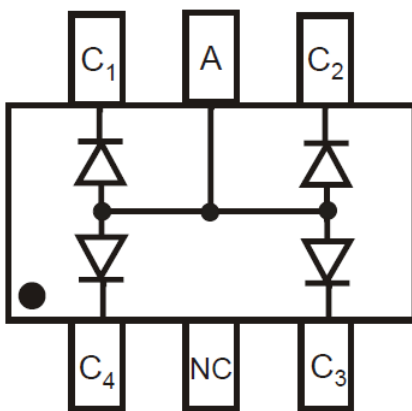
### Equivalent circuit



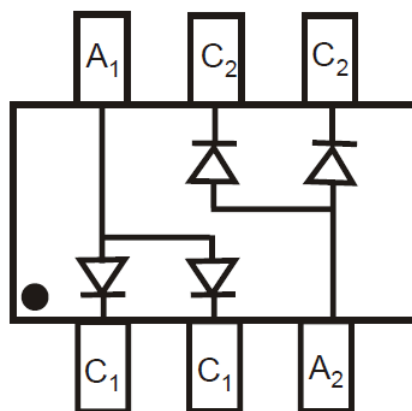
MMBD4448HSDW



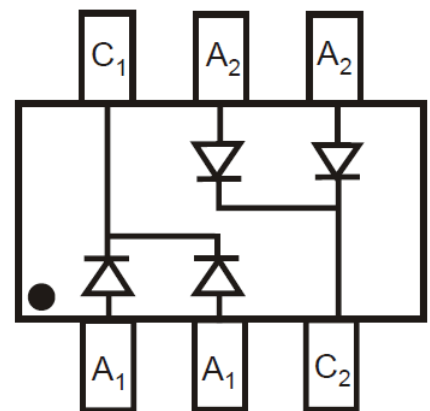
MMBD4448HTW



MMBD4448HAQW



MMBD4448HADW



MMBD4448HCDW



# MMBD4448 HSDW/ HTW/ HAQW/ HADW/ HCDW

## ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Non-Repetitive peak reverse voltage	$V_{RM}$	V		100
Repetitive peak reverse voltage	$V_{RRM}$	V		80
Reverse voltage	$V_R$	V		80
Peak forward surge current	$I_{FSM}$	A	Pulse width=1 us Pulse width=1 s	2 0.5
Average forward current	$I_{FAV}$	mA		150
Power dissipation	$P_D$	mW		200
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	°C/W		625
Maximum junction temperature	$T_j$	°C		-55 ~+150
Storage temperature range	$T_{stg}$	°C		-55 ~+150

## ■ Electrical Characteristics (Ta=25°C unless otherwise specified)

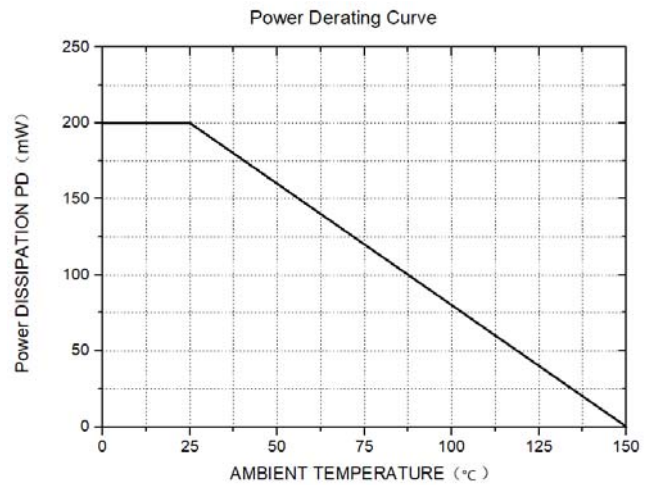
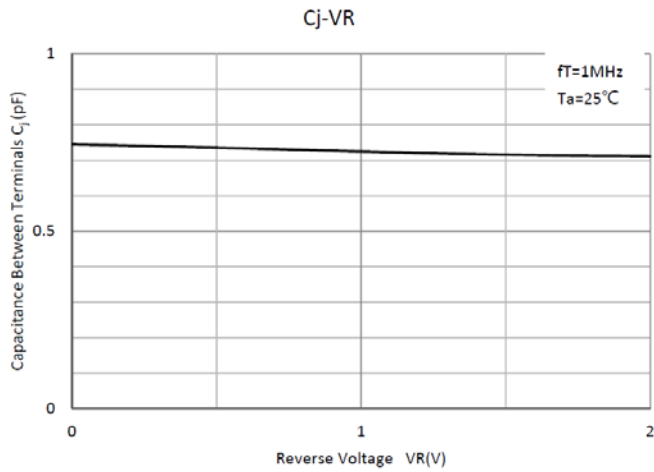
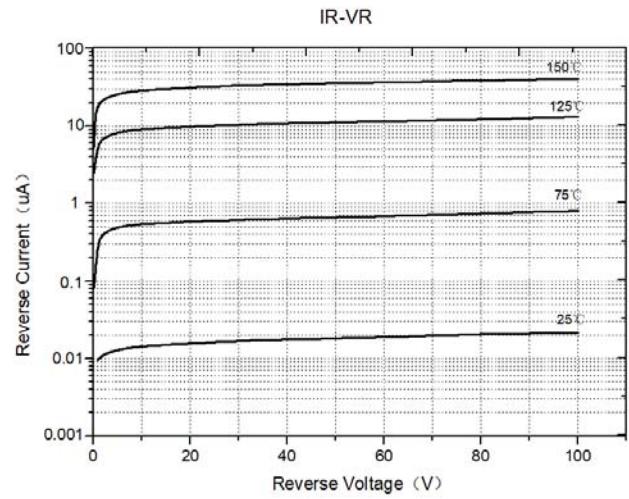
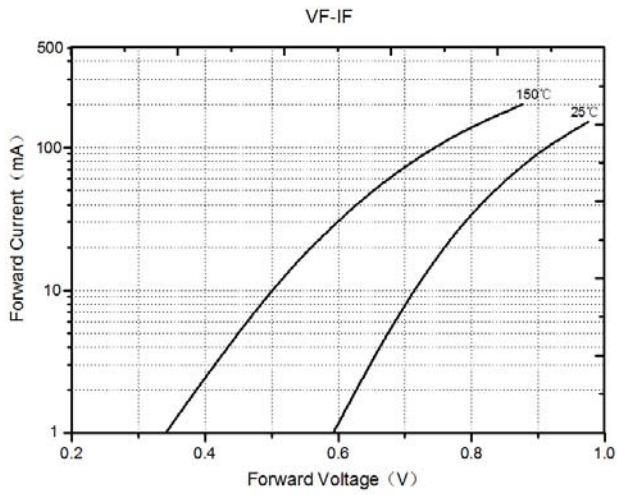
PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	$V_R$	V	$I_R=100\mu A$	80	
Forward Voltage	$V_F$	V	$I_F=5mA$	0.62	0.72
			$I_F=10mA$		0.855
			$I_F=50mA$		1
			$I_F=150mA$		1.25
Reverse Leakage Current	$I_{R1}$	nA	$V_R=20V$		25
	$I_{R2}$	nA	$V_R=70V$		100
Capacitance	C	pF	$V_R=0V, f=1MHz$		3.5
Reverse Recovery Time	$T_{RR}$	ns	$I_F=10mA, V_R=6V$		4

## ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMBD4448HSDW	F2	Approximate 0.009g	3000	30000	120000	7" reel
MMBD4448HTW	F2	Approximate 0.009g	3000	30000	120000	7" reel
MMBD4448HAQW	F2	Approximate 0.009g	3000	30000	120000	7" reel
MMBD4448HADW	F2	Approximate 0.009g	3000	30000	120000	7" reel
MMBD4448HCDW	F2	Approximate 0.009g	3000	30000	120000	7" reel



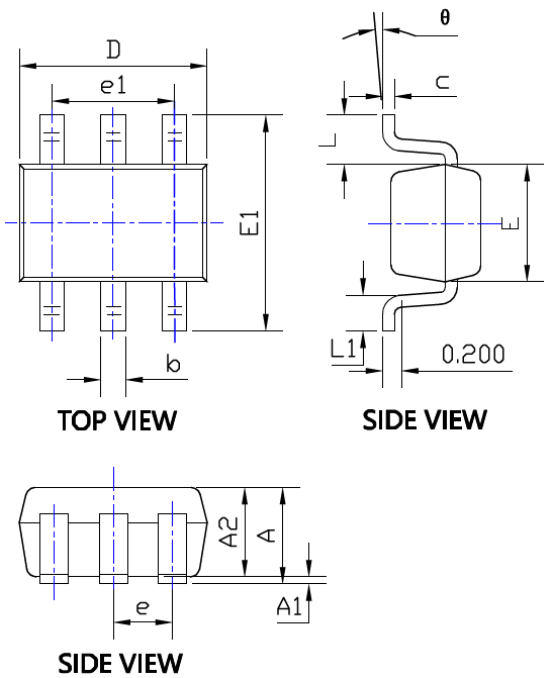
## ■ Characteristics (Typical)





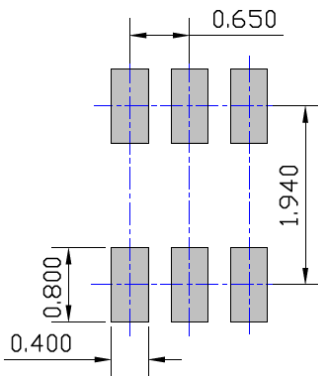
# MMBD4448 HSDW/ HTW/ HAQW/ HADW/ HCDW

## ■SOT-363 Package Outline Dimensions



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.043	0.900	1.100
A1	0.000	0.004	0.000	0.100
A2	0.035	0.039	0.900	1.000
b	0.006	0.014	0.150	0.350
c	0.004	0.010	0.100	0.250
D	0.071	0.087	1.800	2.200
E	0.045	0.053	1.150	1.350
E1	0.085	0.096	2.150	2.450
e	0.026TYP		0.650TYP	
e1	0.047	0.055	1.200	1.400
L	0.021REF		0.525REF	
L1	0.010	0.018	0.260	0.460
$\theta$	0°	8°	0°	8°

## ■SOT-363 Soldering Footprint



Unit: mm



## Disclaimer

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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

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