



**THE DATASHEET OF  
MMBD4448HAQW-TP**





Micro Commercial Components



Micro Commercial Components  
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# MMBD4448HAQW/ ADW/CDW/SDW/ CQW/TW

## Features

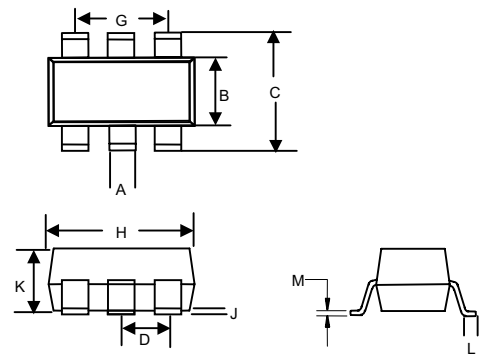
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance, Power Dissipation
- Ultra-Small Surface Mount Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

## 200mW Switching Diodes

## Maximum Ratings

Symbol	Rating	Rating	Unit
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	100	V
$V_{RRM}$	Peak Repetitive Reverse Voltage	80	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_R$	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	57	V
$I_{FM}$	Forward Continuous Current	500	mA
$I_O$	Average Rectified Output Current	250	mA
$I_{FSM}$	Peak Forward Surge Current @ 1.0 $\mu$ s	4.0	A
	@ 1.0s	1.5	
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	625	$^{\circ}C/W$
$P_D$	Power dissipation	200	mW
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{STG}$	Storage Temperature	-65 to +150	$^{\circ}C$

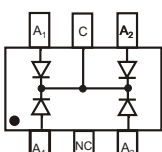
## SOT-363



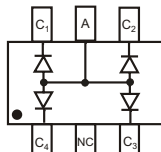
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	80V	---	$I_R=100 \mu A$
$I_R$	Reverse Voltage Leakage Current	---	100nA	$V_R=70V$
			$50 \mu A$	$V_R=75V, T_J=150^{\circ}C$
			$30 \mu A$	$V_R=25V, T_J=150^{\circ}C$
$V_F$	Forward Voltage	0.62	0.72V	$I_F=5.0mA$
		---	0.855V	$I_F=10mA$
		---	1.0V	$I_F=50mA$
$C_T$	Total Capacitance	---	3.5pF	$V_R=6V, f=1MHz$
			---	4.0ns

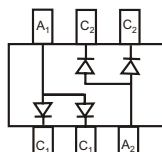
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.006	.014	0.15	0.35	
B	.045	.053	1.15	1.35	
C	.085	.096	2.15	2.45	
D	.026		0.65Nominal		
G	.047	.055	1.20	1.40	
H	.071	.087	1.80	2.20	
J	---	.004	---	0.10	
K	.035	.043	0.90	1.10	
L	.010	.018	0.26	0.46	
M	.003	.006	0.08	0.15	



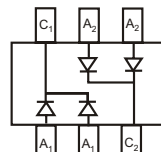
Marking: KA4  
MMBD4448HCQW



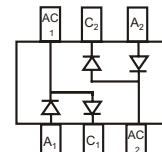
Marking: KA5  
MMBD4448HAQW



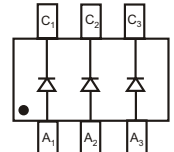
Marking: KA6  
MMBD4448HADW



Marking: KA7  
MMBD4448HCDW



Marking: KAB  
MMBD4448HSDW



Marking: KAA  
MMBD4448HTW

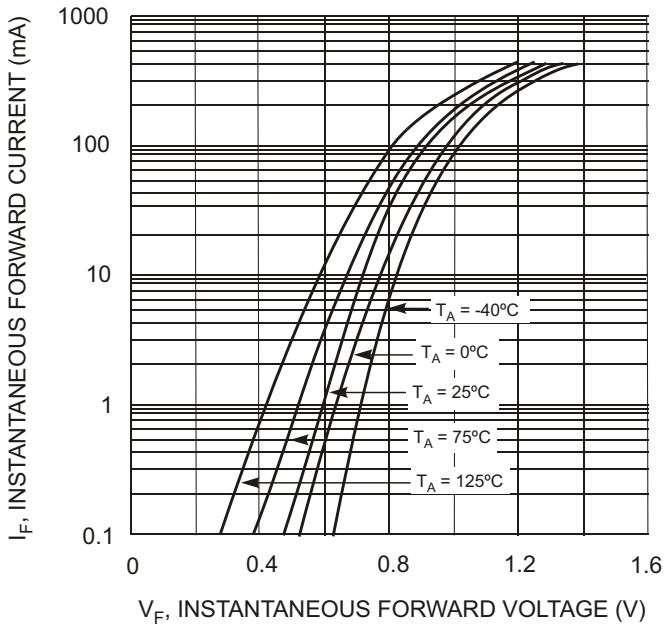


Fig. 1 Typical Forward Characteristics

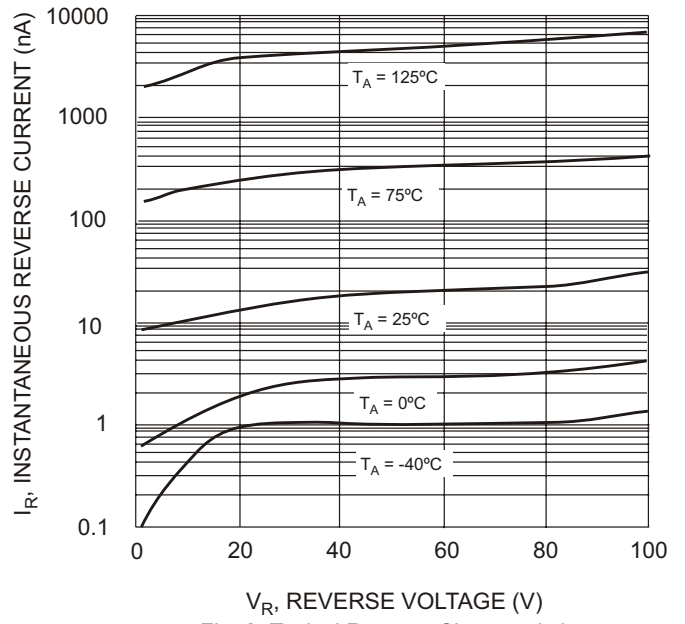


Fig. 2 Typical Reverse Characteristics

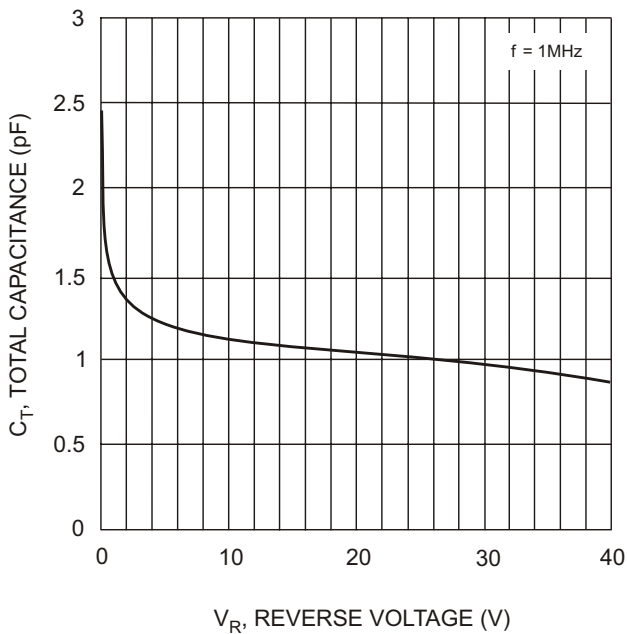


Fig. 3 Typical Capacitance vs. Reverse Voltage

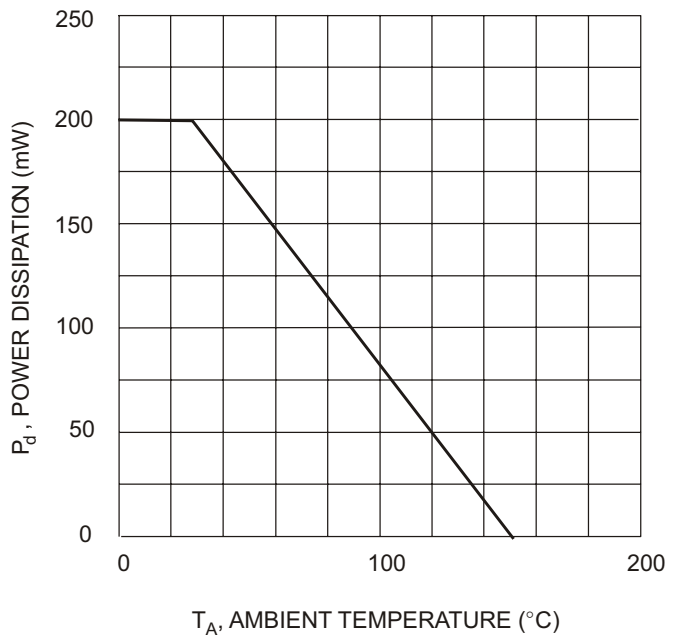
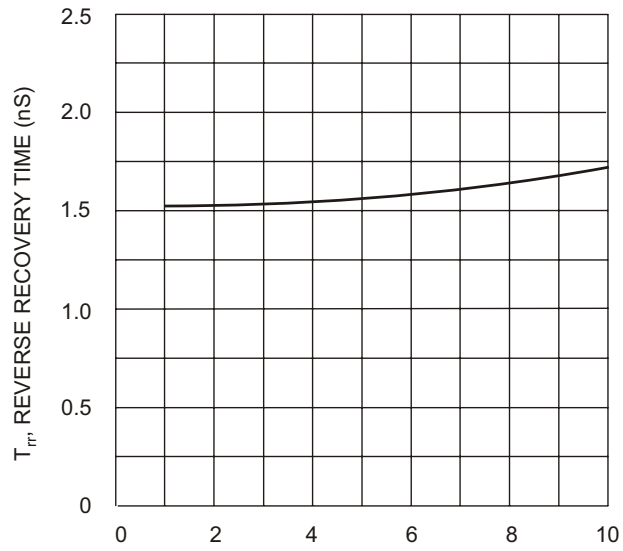


Fig. 4 Power Derating Curve, Total Package



$I_F$ , FORWARD CURRENT (mA)  
Fig. 5 Reverse Recovery Time vs.  
Forward Current



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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