



**THE DATASHEET OF
MMBD4448DW-TP**



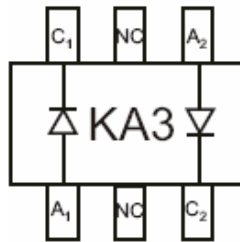


MMBD4448DW

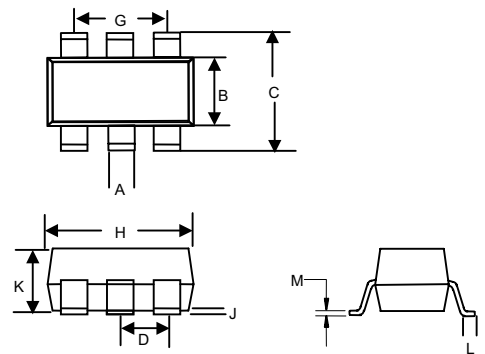
200mW Switching Diodes

Features

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



SOT-363



Maximum Ratings

Symbol	Rating	Rating	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Peak Repetitive Reverse Voltage	75	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_{FM}	Forward Continuous Current	500	mA
I_O	Average Rectified Output Current	250	mA
I_{FSM}	Peak Forward Surge Current @ 1.0 μ s	4.0	A
		@ 1.0s	
$R_{\theta JA}$	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	$^{\circ}C$

Electrical Characteristics @ 25 $^{\circ}C$ Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions	
$V_{(BR)}$	Reverse Breakdown Voltage	75V	---	$I_R=10 \mu A$	
I_R	Reverse Voltage Leakage Current	---	2.5 μA	$V_R=75V, T_J=150^{\circ}C$	
			50 μA	$V_R=25V, T_J=150^{\circ}C$	
			35 μA	$V_R=20V$	
V_F	Forward Voltage	0.6	0.72V	$I_F=5.0mA$	
			---	0.855V	$I_F=10mA$
			---	1.0V	$I_F=50mA$
C_T	Total Capacitance	---	1.25V	$I_F=150mA$	
			---	4.0pF	$V_R=0V, f=1MHZ$
t_{rr}	Reverse Recovery Time	---	4.0ns	$I_R=I_F=10mA, I_{rr}=0.1xI_R, R_L=100 \Omega$	

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	

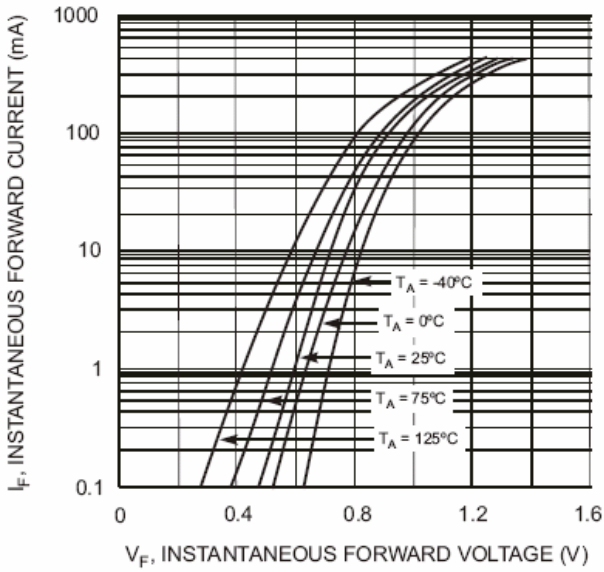


Fig. 1 Typical Forward Characteristics

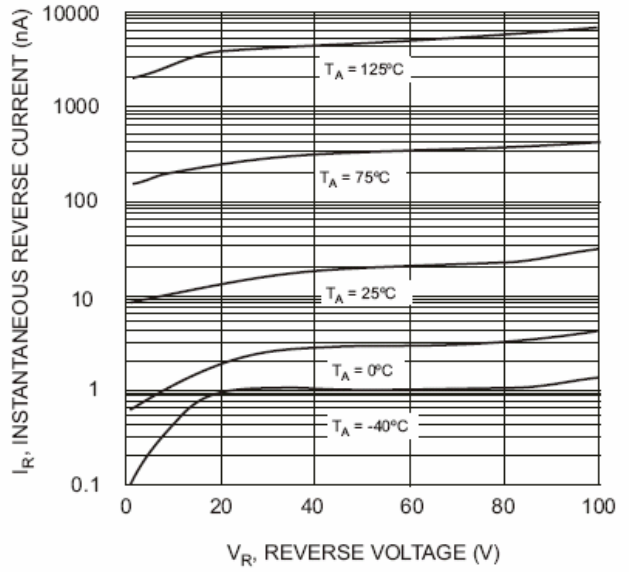


Fig. 2 Typical Reverse Characteristics

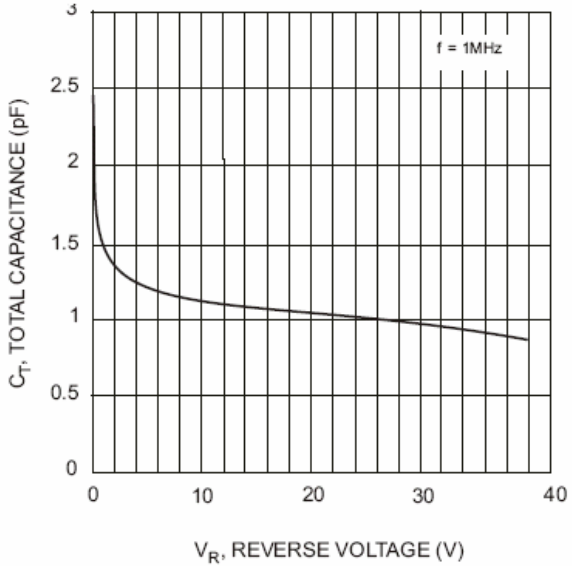


Fig. 3 Typical Total Capacitance vs. Reverse Voltage

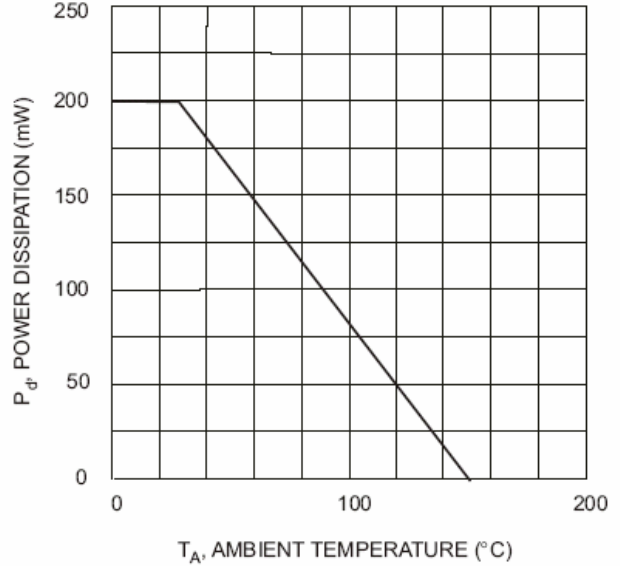


Fig. 4 Power Derating Curve, Total Package

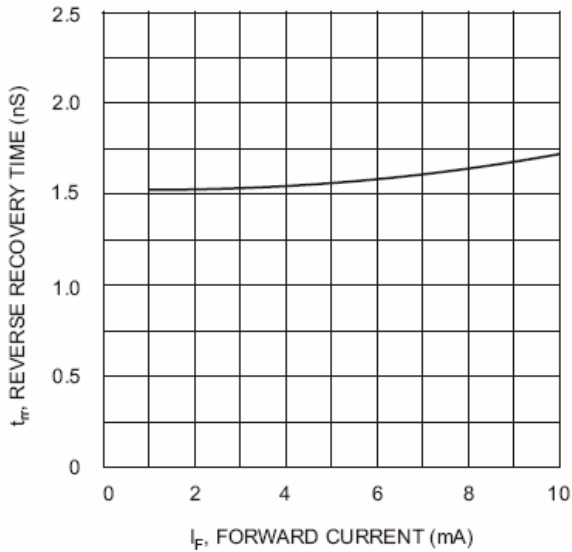


Fig. 5 Reverse Recovery Time vs. Forward Current



TM

Micro Commercial Components

Ordering Information :

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

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View MMBD4448DW-TP on WIN SOURCE](#)
- ⊖ [Micro Commercial Co](#) Information

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management