

**Micro Commercial Components** 



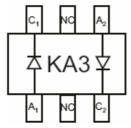
Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

# MMBD4448DW

## **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



# **Maximum Ratings**

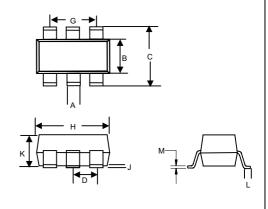
Symbol	Rating	Rating	Unit
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	100	V
$V_{RRM}$	Peak Repetitive Reverse Voltage		
$V_{RWM}$	Working Peak Reverse Voltage	75	V
$V_R$	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53 V	
I <sub>FM</sub>	Forward Continuous Current	500 mA	
Io	Average Rectified Output Current	250	mA
I <sub>FSM</sub>	Peak Forward Surge Current @1.0 μ s	4.0	Α
	@1.0s	2.0	A
R <sub>0 JA</sub>	Thermal Resistance Junction to Ambient	625	°C/W
$P_D$	Power dissipation	200	mW
TJ	Junction Temperature	150	$^{\circ}$
T <sub>STG</sub>	Storage Temperature	-65 to +150	$^{\circ}$

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	75V		I <sub>R</sub> =10 μ A
I <sub>R</sub>	Reverse Voltage Leakage Current		2.5 μ A 50 μ A 35 μ A	V <sub>R</sub> =75V V <sub>R</sub> =75V, T <sub>J</sub> =150°C V <sub>R</sub> =25V, T <sub>J</sub> =150°C
			25nA	V <sub>R</sub> =20V
V <sub>F</sub>	Forward Voltage	0.6	0.72V	I <sub>F</sub> =5.0mA
			0.855V	I <sub>F</sub> =10mA
			1.0V	I <sub>F</sub> =50mA
			1.25V	I <sub>F</sub> =150mA
Ст	Total Capacitance		4.0pF	V <sub>R</sub> =0V, f=1MHZ
t <sub>rr</sub>	Reverse Recovery Time		4.0ns	$I_R==I_F=10\text{mA},$ $Irr=0.1xI_R,$ $R_L=100 \Omega$

# 200mW Switching Diodes

SOT-363

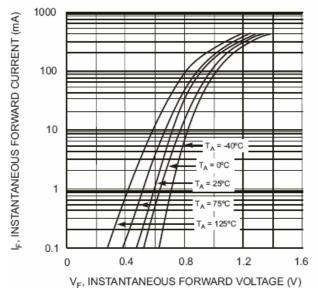


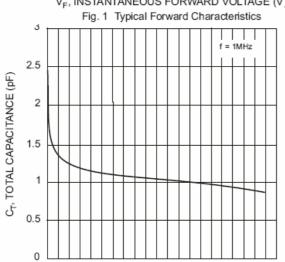
DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.006	.014	0.15	0.35		
В	.045	.053	1.15	1.35		
С	.085	.096	2.15	2.45		
D	.026		0.65Nominal			
G	.047	.055	1.20	1.40		
Н	.071	.087	1.80	2.20		
J		.004		0.10		
K	.035	.043	0.90	1.10		
L	.010	.018	0.26	0.46		
М	.003	.006	0.08	0.15		

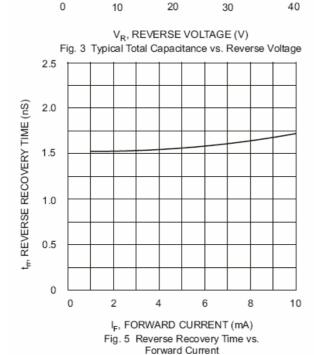
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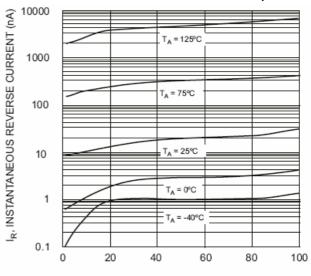
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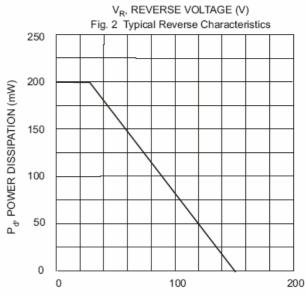












T<sub>A</sub>, AMBIENT TEMPERATURE (°C) Fig. 4 Power Derating Curve, Total Package

40



### **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

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