

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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# MMBD4448HT/ HTA/HTC/HTS

## **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"

## **Maximum Ratings**

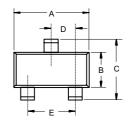
Symbol	Rating	Unit	
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	100	V
$V_{RRM}$ $V_{RWM}$	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage	80	V
V <sub>R</sub>	DC Blocking Voltage RMS Reverse Voltage	57	V
I <sub>FM</sub>	Forward Continuous Current	500	mA
Ιο	Average Rectified Output Current	250	mA
I <sub>FSM</sub>	Peak Forward Surge Current @1.0 µ s @1.0s	4.0 2.0	Α
R <sub>0</sub> JA	Thermal Resistance Junction to Ambient	833	°C/W
P <sub>D</sub>	Power dissipation	150	mW
ΤJ	Junction Temperature	150	$^{\circ}$
T <sub>STG</sub>	Storage Temperature	-65 to +150	$^{\circ}\mathbb{C}$

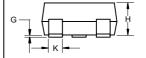
### Electrical Characteristics @ 25°C Unless Otherwise Specified

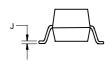
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Symbol	Parameter	Min	Max	Test Conditions	
$V_{(BR)}$	Reverse Breakdown Voltage	80V		I <sub>R</sub> =2.5 μ A	
I <sub>R</sub>	Reverse Voltage Leakage Current		0.1 μ A 25 nA	V <sub>R</sub> =70V V <sub>R</sub> =20V	
V <sub>F</sub>	Forward Voltage	0.62  	0.72V 0.855V 1.0V 1.25V	I <sub>F</sub> =5.0mA I <sub>F</sub> =10mA I <sub>F</sub> =100mA I <sub>F</sub> =150mA	
Ст	Total Capacitance		3.5pF	V <sub>R</sub> =6V, f=1MHZ	
t <sub>rr</sub>	Reverse Recovery Time		4.0ns	I <sub>F</sub> =5mA, VR=6V	

## 150mW Switching Diodes

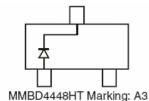
## **SOT-523**

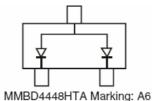


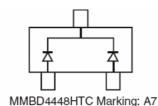


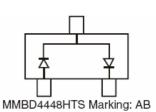


DIMENSIONS					
	INC	INCHES MM			
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.059	.067	1.50	1.70	
В	.030	.033	0.75	0.85	
O	.057	.069	1.45	1.75	
О	.020 No	ominal	0.50Nom	inal	
Е	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
Τ	.028	.031	.70	0.80	
٦	.004	.008	.100	.200	
Κ	.010	.014	.25	.35	

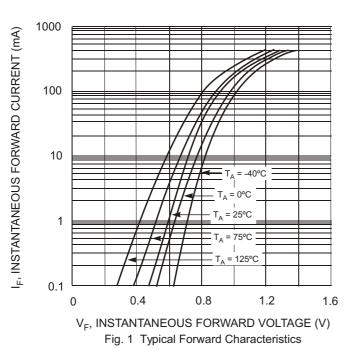


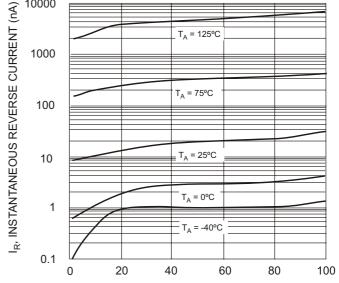






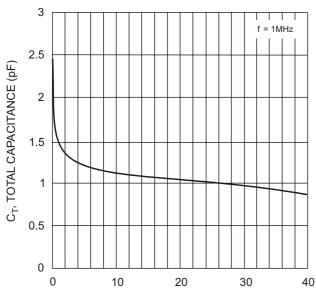
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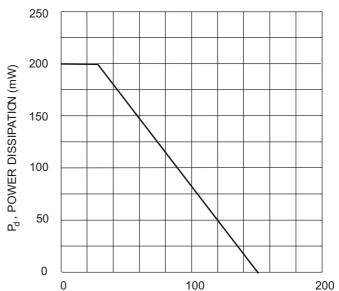




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V<sub>R</sub>, REVERSE VOLTAGE (V) Fig. 2 Typical Reverse Characteristics





 $V_R$ , REVERSE VOLTAGE (V) Fig. 3 Typical Capacitance vs. Reverse Voltage

 $T_A$ , AMBIENT TEMPERATURE (°C) Fig. 4 Power Derating Curve, Total Package



#### **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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