



Micro Commercial Components



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# MMBD4448HT/ HTA/HTC/HTS

## 150mW Switching Diodes

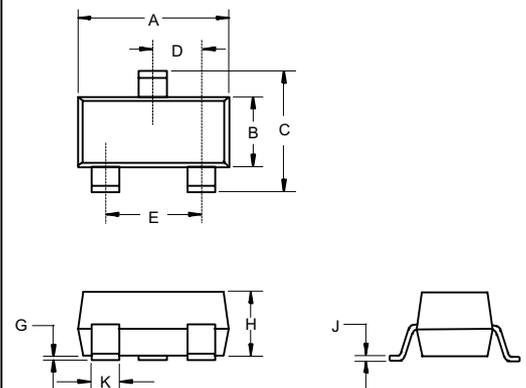
### Features

- 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	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	
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	833	$^{\circ}C/W$
$P_D$	Power dissipation	150	mW
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{STG}$	Storage Temperature	-65 to +150	$^{\circ}C$

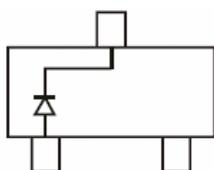
### SOT-523



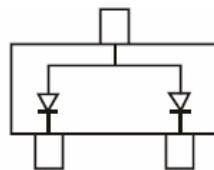
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.030	.033	0.75	0.85	
C	.057	.069	1.45	1.75	
D	.020 Nominal		0.50 Nominal		
E	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
H	.028	.031	.70	0.80	
J	.004	.008	.100	.200	
K	.010	.014	.25	.35	

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

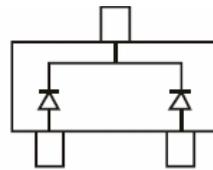
Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	80V	---	$I_R=2.5 \mu A$
$I_R$	Reverse Voltage Leakage Current	---	0.1 $\mu A$	$V_R=70V$
			25 nA	$V_R=20V$
$V_F$	Forward Voltage	0.62	0.72V	$I_F=5.0mA$
		---	0.855V	$I_F=10mA$
		---	1.0V	$I_F=100mA$
		---	1.25V	$I_F=150mA$
$C_T$	Total Capacitance	---	3.5pF	$V_R=6V, f=1MHz$
$t_{rr}$	Reverse Recovery Time	---	4.0ns	$I_F=5mA, V_R=6V$



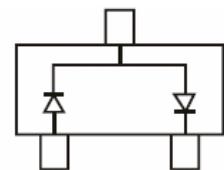
MMBD4448HT Marking: A3



MMBD4448HTA Marking: A6



MMBD4448HTC Marking: A7



MMBD4448HTS Marking: AB

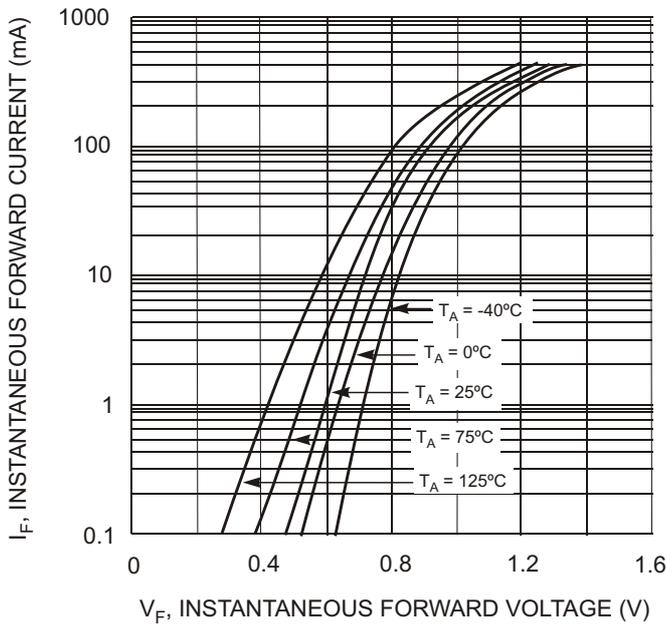


Fig. 1 Typical Forward Characteristics

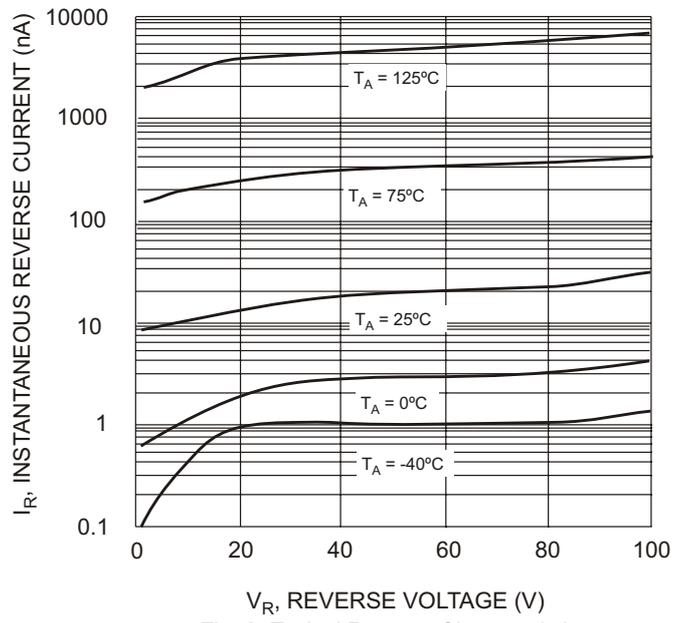


Fig. 2 Typical Reverse Characteristics

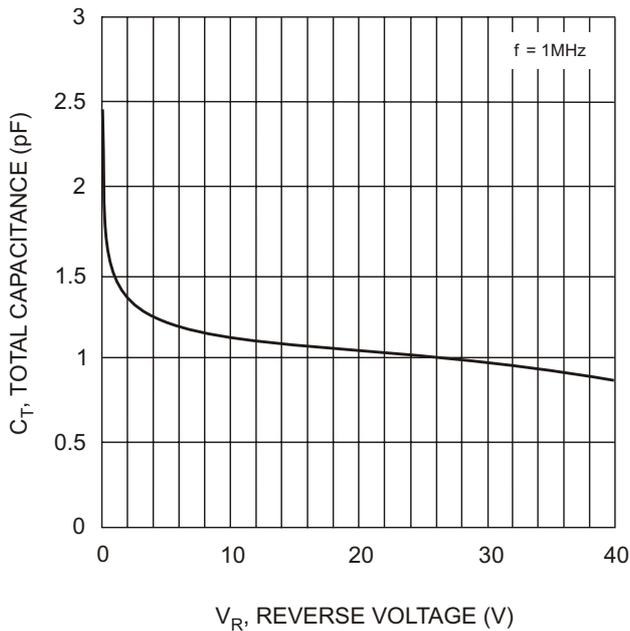


Fig. 3 Typical Capacitance vs. Reverse Voltage

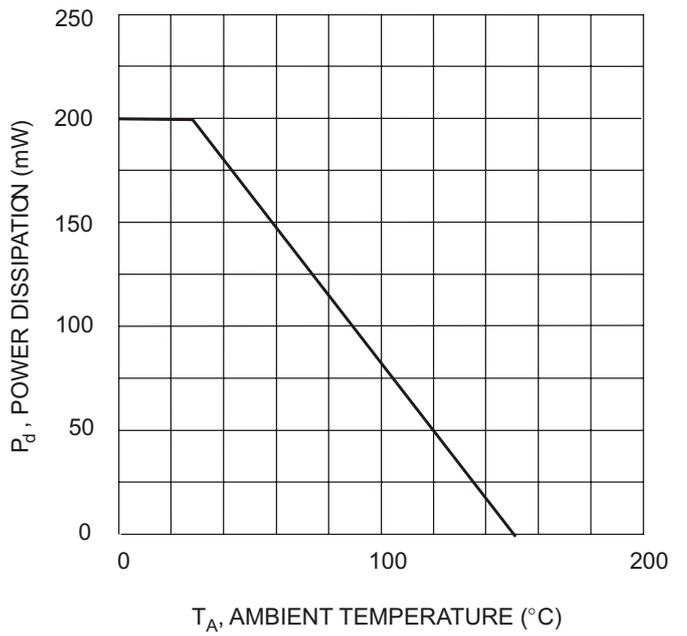


Fig. 4 Power Derating Curve, Total Package



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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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