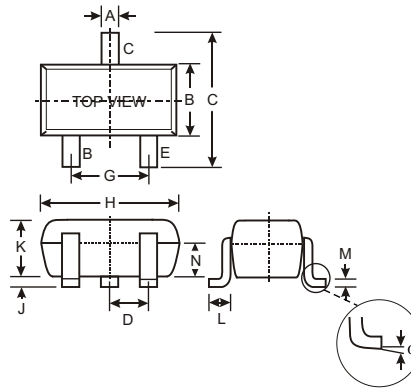


### Features

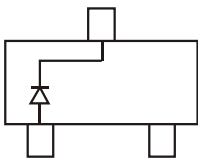
- Ultra-Small Surface Mount Package
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

### Mechanical Data

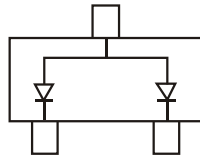
- Case: SOT-523, Molded Plastic
- Case Material - UL Flammability Rating Classification 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Marking: See Diagrams Below & Page 2



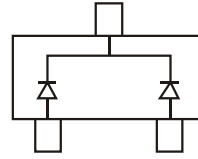
SOT-523			
Dim	Min	Max	Typ
A	0.15	0.30	0.22
B	0.75	0.85	0.80
C	1.45	1.75	1.60
D			0.50
G	0.90	1.10	1.00
H	1.50	1.70	1.60
J	0.00	0.10	0.05
K	0.60	0.80	0.75
L	0.10	0.30	0.22
M	0.10	0.20	0.12
N	0.45	0.65	0.50
	0	8	
All Dimensions in mm			



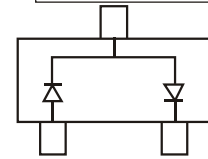
MMBD4448HT Marking: A3



MMBD4448HTA Marking: A6



MMBD4448HTC Marking: A7



MMBD4448HTS Marking: A8

### Maximum Ratings @ T<sub>A</sub> = 25 C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	80	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	57	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>	500	mA
Average Rectified Output Current (Note 1)	I <sub>O</sub>	250	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0 s @ t = 1.0s	I <sub>FSM</sub>	4.0 2.0	A
Power Dissipation (Note 1)	P <sub>d</sub>	150	mW
Thermal Resistance Junction to Ambient (Note 1)	R <sub>JA</sub>	833	C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	C

### Electrical Characteristics @ T<sub>A</sub> = 25 C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V <sub>(BR)R</sub>	80		V	I <sub>R</sub> = 2.5 A
Forward Voltage (Note 2)	V <sub>F</sub>	0.62	0.72 0.855 1.0 1.25	V	I <sub>F</sub> = 5.0mA I <sub>F</sub> = 10mA I <sub>F</sub> = 100mA I <sub>F</sub> = 150mA
Leakage Current (Note 2)	I <sub>R</sub>		100 50 30 25	nA A A nA	V <sub>R</sub> = 70V V <sub>R</sub> = 75V, T <sub>J</sub> = 150 C V <sub>R</sub> = 25V, T <sub>J</sub> = 150 C V <sub>R</sub> = 20V
Total Capacitance	C <sub>T</sub>		3.5	pF	V <sub>R</sub> = 6V, f = 1.0MHz
Reverse Recovery Time	t <sub>rr</sub>		4.0	ns	V <sub>R</sub> = 6V, I <sub>F</sub> = 5mA

Notes: 1. Device mounted on FR-4 PC board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.

2. Short duration test pulse used to minimize self-heating effect.

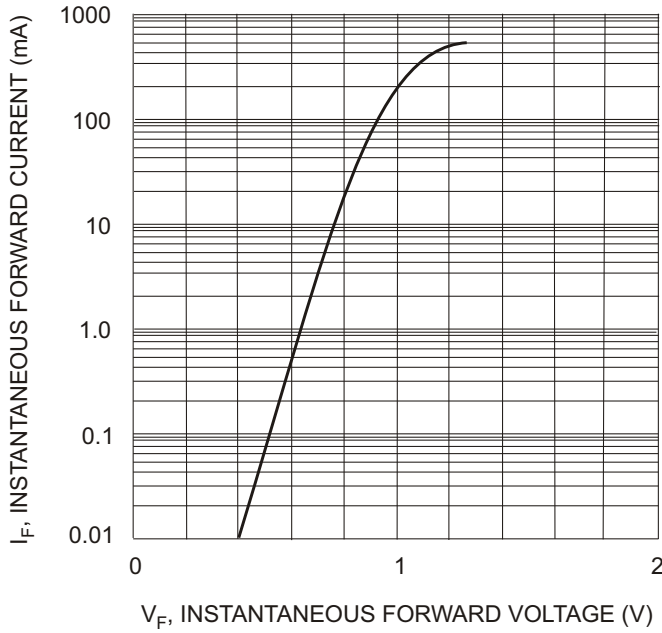


Fig. 1 Forward Characteristics

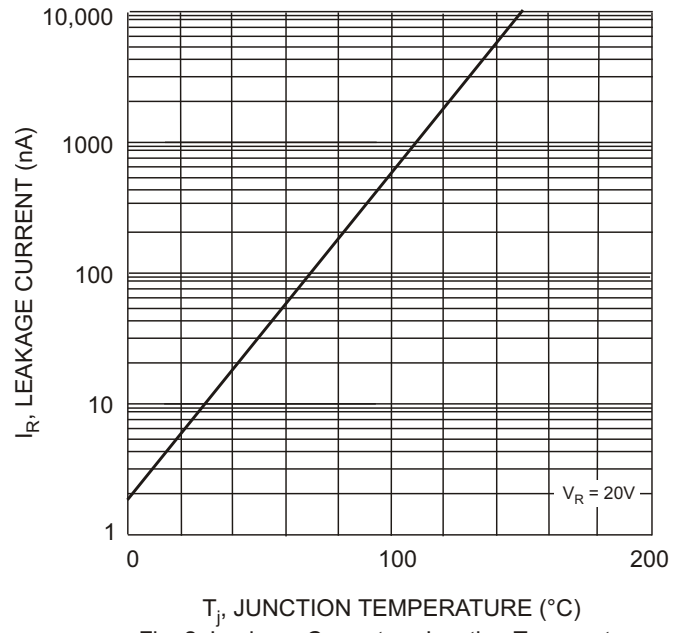
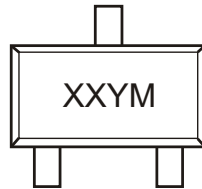


Fig. 2 Leakage Current vs Junction Temperature

### Ordering Information (Note 3)

Device	Packaging	Shipping
MMBD4448HT-7	SOT-523	3000/Tape & Reel
MMBD4448HTA-7	SOT-523	3000/Tape & Reel
MMBD4448HTC-7	SOT-523	3000/Tape & Reel
MMBD4448HTS-7	SOT-523	3000/Tape & Reel

### Marking Information



XX = Product Type Marking Code (See Page 1 Diagrams)  
 YM = Date Code Marking  
 Y = Year (ex: N = 2002)  
 M = Month (ex: 9 = September)

#### Date Code Key

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Code	M	N	P	R	S	T	U	V	W

Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

Notes: 3. For Packaging Details: go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.