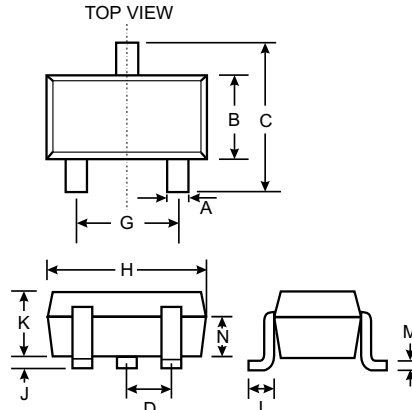


Features

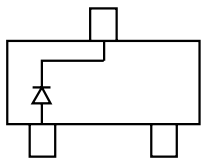
- Ultra-Small Surface Mount Package
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

Mechanical Data

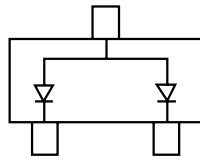
- Case: SOT-523, Molded Plastic
- Case Material - UL Flammability Rating Classification 94V-0
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Marking: See Diagram



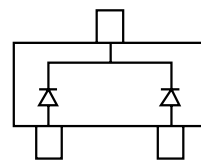
SOT-523			
Dim	Min	Max	Typ
A	0.15	0.30	0.22
B	0.75	0.85	0.80
C	1.45	1.75	1.60
D	—	—	0.50
G	0.90	1.10	1.00
H	1.50	1.70	1.60
J	0.00	0.10	0.05
K	0.60	0.80	0.75
L	0.10	0.30	0.22
M	0.10	0.20	0.12
N	0.45	0.65	0.50
All Dimensions in mm			



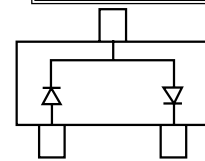
MMBD4448HT Marking: A3



MMBD4448HAT Marking: A6



MMBD4448HCT Marking: A7



MMBD4448HST Marking: AB

Maximum Ratings @ T_A = 25°C unless otherwise specified

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

Electrical Characteristics @ T_A = 25°C unless otherwise specified

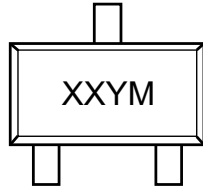
Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V _{(BR)R}	80	—	V	I _R = 2.5μA
Forward Voltage (Note 2)	V _F	0.62	0.72	V	I _F = 5.0mA
		—	0.855		I _F = 10mA
		—	1.0		I _F = 100mA
		—	1.25		I _F = 150mA
Leakage Current (Note 2)	I _R	—	100	nA	V _R = 70V
		—	50	μA	V _R = 75V, T _J = 150°C
		—	30	μA	V _R = 25V, T _J = 150°C
		—	25	nA	V _R = 20V
Junction Capacitance	C _j	—	3.5	pF	V _R = 6V, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	4.0	ns	V _R = 6V, I _F = 5mA

Notes: 1. Device mounted on FR-4 PC board with recommended pad layout.
2. Short duration test pulse used to minimize self-heating effect.

Ordering Information (Note 3)

Device	Packaging	Shipping
MMBD4448HT-7	SOT-523	3000/Tape & Reel
MMBD4448HAT-7	SOT-523	3000/Tape & Reel
MMBD4448HCT-7	SOT-523	3000/Tape & Reel
MMBD4448HST-7	SOT-523	3000/Tape & Reel

Marking Information



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

Date Code Key

Year	1998	1999	2000	2001	2002	2003	2004
Code	J	K	L	M	N	O	P

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>.

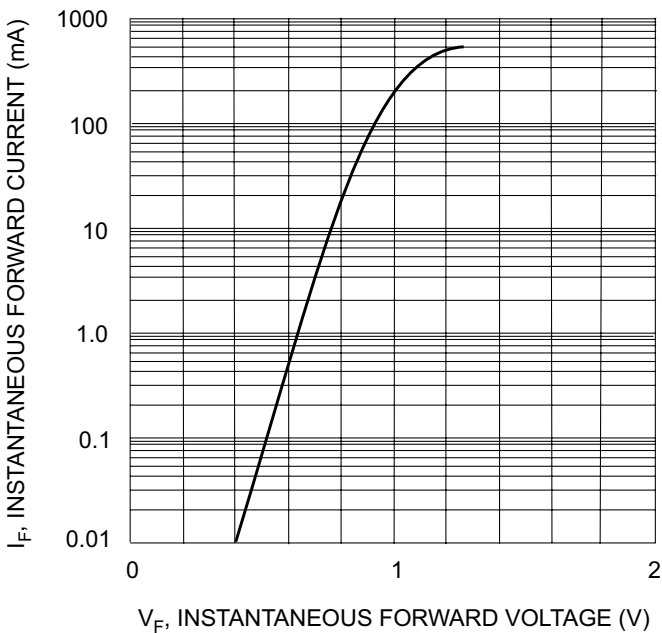


Fig. 1 Forward Characteristics

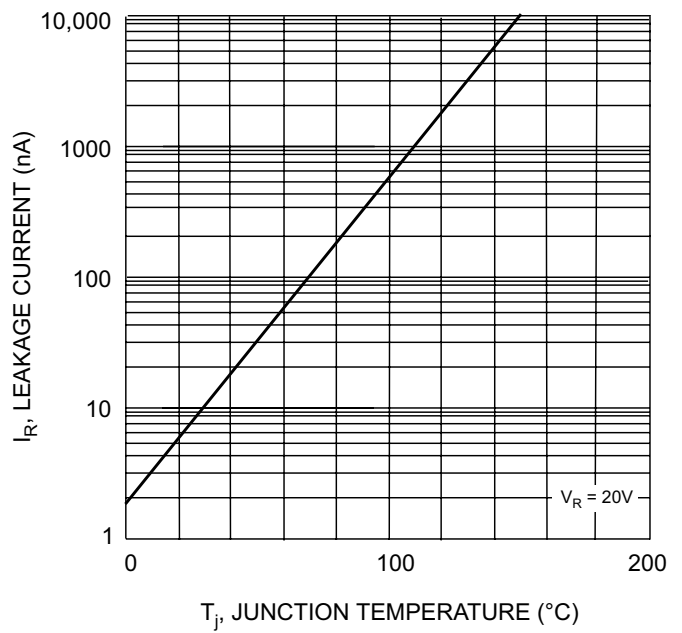


Fig. 2 Leakage Current vs Junction Temperature