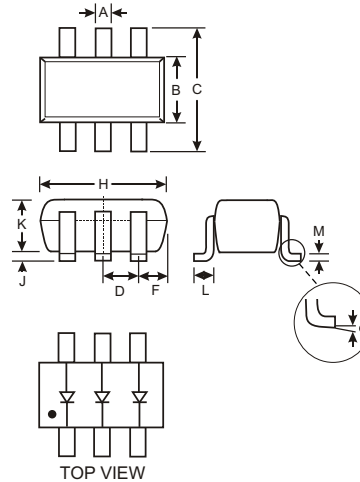


Features

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

Mechanical Data

- Case: SOT-26, 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
- Orientation: See Diagram
- Marking: KAD (See Page 2)
- Weight: 0.016 grams (approx.)



SOT-26			
Dim	Min	Max	Typ
A	0.35	0.50	0.38
B	1.50	1.70	1.60
C	2.70	3.00	2.80
D			0.95
F			0.55
H	2.90	3.10	3.00
J	0.013	0.10	0.05
K	1.00	1.30	1.10
L	0.35	0.55	0.40
M	0.10	0.20	0.15
	0	8	
All Dimensions in mm			

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 (Note 1)	I_{FM}	500	mA
Average Rectified Output Current (Note 1)	I_O	250	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0$ s @ $t = 1.0$ s	I_{FSM}	4.0 2.0	A
Power Dissipation (Note 1)	P_d	225	mW
Thermal Resistance Junction to Ambient Air (Note 1)	R_{JA}	555	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	$I_R = 2.5$ A
Forward Voltage (Note 2)	V_F	0.62	0.72 0.855 1.0 1.25	V	$I_F = 5.0$ mA $I_F = 10$ mA $I_F = 100$ mA $I_F = 150$ mA
Reverse Current (Note 2)	I_R		100 50 30 25	nA A A nA	$V_R = 70$ V $V_R = 75$ V, $T_j = 150$ C $V_R = 25$ V, $T_j = 150$ C $V_R = 20$ V
Total Capacitance	C_T		3.5	pF	$V_R = 6$, $f = 1.0$ MHz
Reverse Recovery Time	t_{rr}		4.0	ns	$V_R = 6$ V, $I_F = 5$ mA

- Notes: 1. Device mounted on FR-5 PCB 1.0 x 0.75 x 0.062 inch pad layout as shown on Diodes Inc. suggested pad layout AP02001, 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.

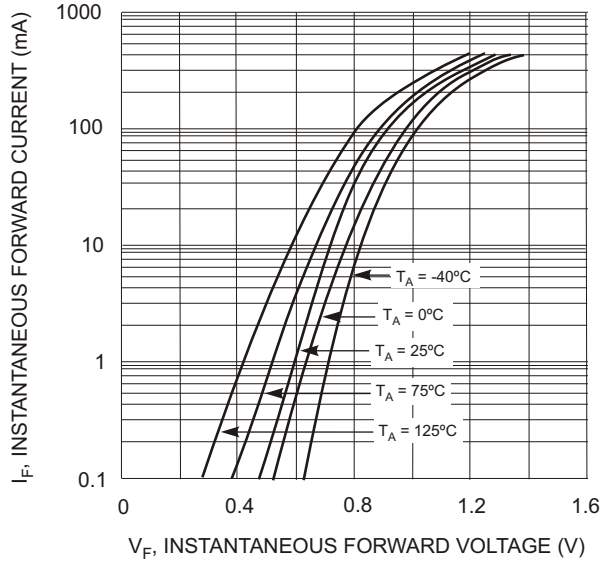


Fig. 1 Typical Forward Characteristics

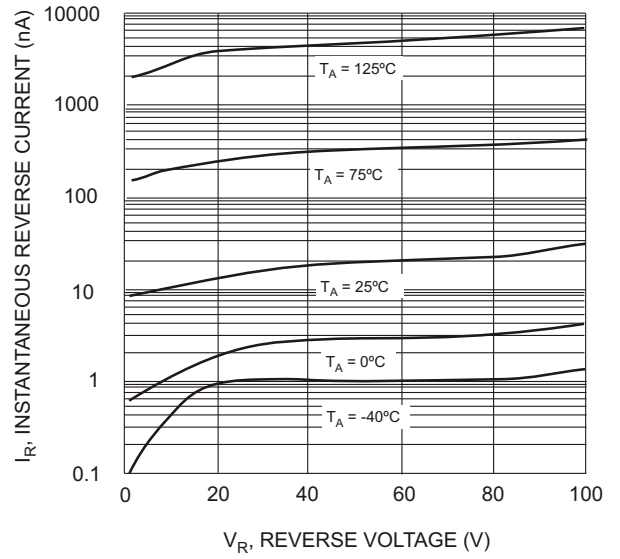


Fig. 2 Typical Reverse Characteristics

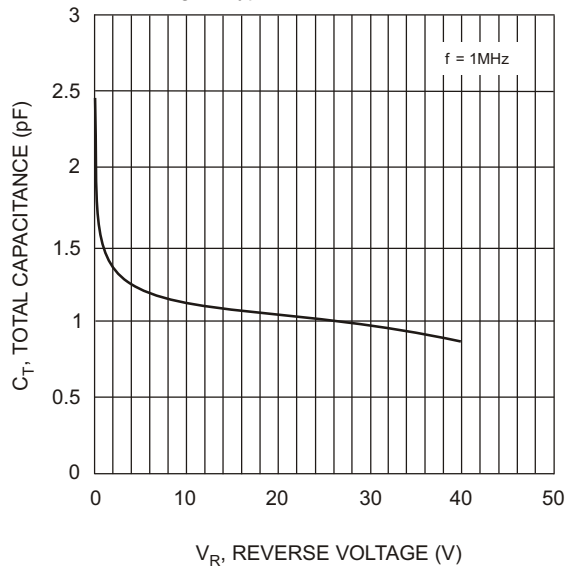


Fig. 3 Typical Capacitance vs. Reverse Voltage

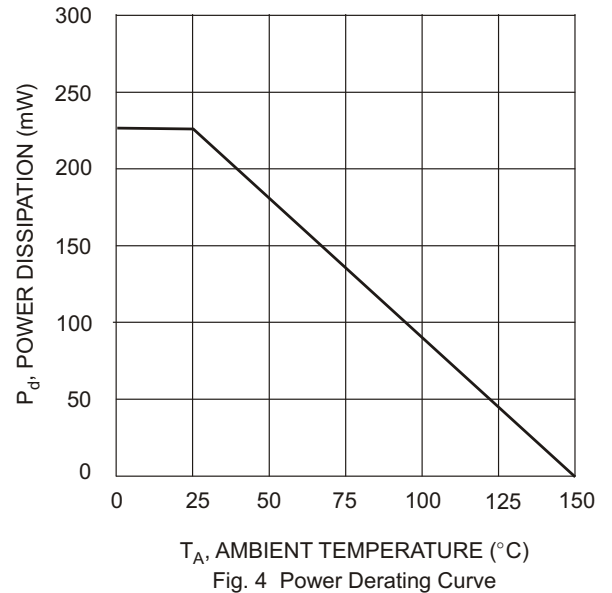


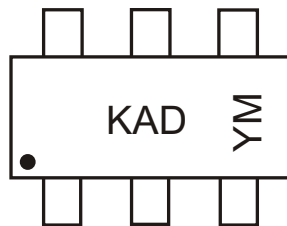
Fig. 4 Power Derating Curve

Ordering Information (Note 3)

Device	Packaging	Shipping
MMBD4448HTM-7	SOT-26	3000/Tape & Reel

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

Marking Information



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

Date Code Key

Year	2002	2003	2004	2005	2006	2007	2008	2009
Code	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