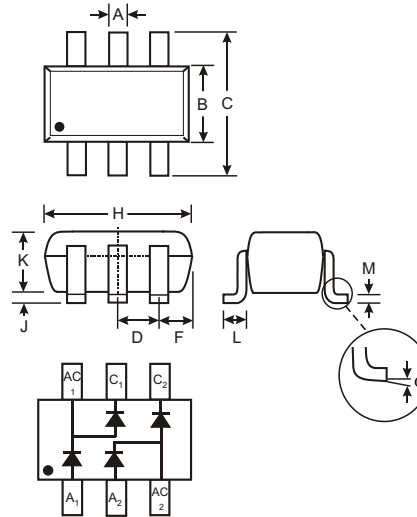


Features

- Two Series Diode Circuits Connect to Form Full Wave Bridge
- Fast Switching Speed
- High Conductance
- High Reverse Breakdown Voltage Rating
- Lead Free/RoHS Compliant Version (Note 3)**
- "Green" Device (Note 4 and 5)**

Mechanical Data

- Case: SOT-26
- Case Material: Molded Plastic, "Green" Molding Compound, Note 5. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Copper leadframe).
- Polarity: See Diagram
- Marking: KAE (See Page 2)
- Ordering Information: See Page 2
- Weight: 0.016 grams (approximate)



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, per element

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	350	V
Working Peak Reverse Voltage DC Blocking Voltage	V _{RWM} V _R	300	V
RMS Reverse Voltage	V _{R(RMS)}	212	V
Forward Continuous Current (Note 1)	I _F	225	mA
Peak Repetitive Forward Current (Note 1)	I _{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0 s @ t = 1.0s	I _{FSM}	4.0 1.0	A
Power Dissipation (Note 1)	P _d	350	mW
Thermal Resistance Junction to Ambient Air (Note 1)	R _{JA}	357	C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150	C

Electrical Characteristics @ T_A = 25°C unless otherwise specified, per element

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V _{(BR)R}	350			V	I _R = 150 A
Forward Voltage	V _F		0.78 0.93 1.03	0.87 1.0 1.25	V	I _F = 20mA I _F = 100mA I _F = 200mA
Reverse Current (Note 2)	I _R		30 35	100 100	nA A	V _R = 240V V _R = 240V, T _j = 150 C
Total Capacitance	C _T		1.0	5.0	pF	V _R = 0V, f = 1.0MHz
Reverse Recovery Time	t _{rr}			50	ns	I _F = I _R = 30mA, I _{rr} = 3.0mA, R _L = 100

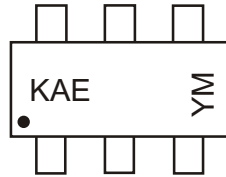
- Notes:
1. Part mounted on FR-4 board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.
 2. Short duration test pulse used to minimize self-heating effect.
 3. No purposefully added lead.
 4. Diodes Inc.'s "Green" policy can be found on our website at http://www.diodes.com/products/lead_free/index.php.
 5. Product manufactured with Date Code 0609 (week 9, 2006) and newer are built with Green Molding Compound. Product manufactured prior to Date Code 0609 are built with Non-Green Molding Compound and may contain Halogens or Sb2O3 Fire Retardants.

Ordering Information (Note 5 & 6)

Device	Packaging	Shipping
MMBD3004BRM-7-F	SOT-26	3000/Tape & Reel

- Note: 5. Product manufactured with Date Code 0609 (week 9, 2006) and newer are built with Green Molding Compound. Product manufactured prior to Date Code 0609 are built with Non-Green Molding Compound and may contain Halogens or Sb2O3 Fire Retardants.
6. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

Marking Information



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

Date Code Key

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Code	P	R	S	T	U	V	W	X	Y	Z

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

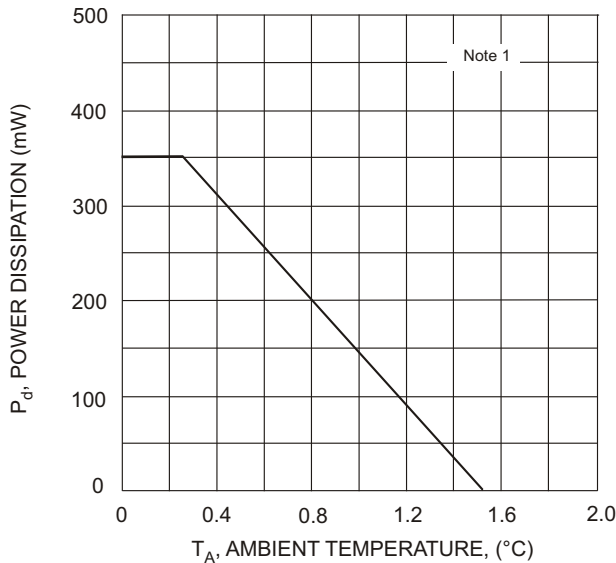


Fig. 1 Power Derating Curve, total package

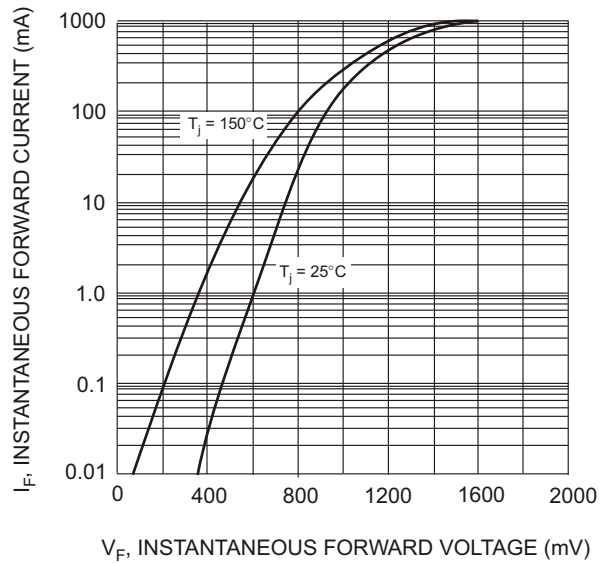


Fig. 2 Typical Forward Characteristics, per element

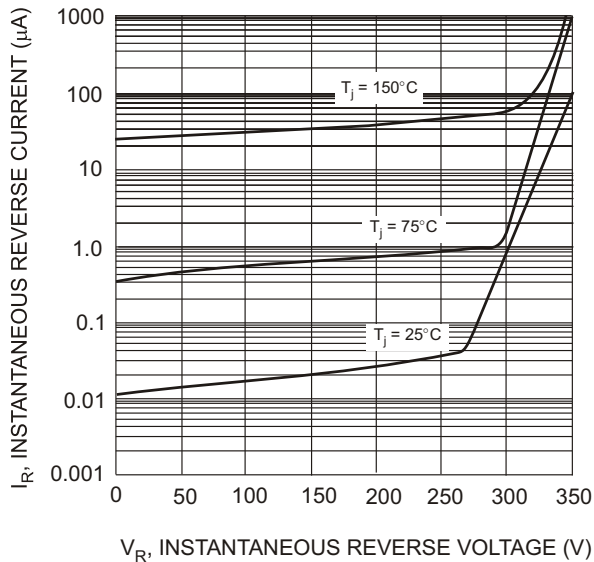


Fig. 3 Typical Reverse Characteristics, per element

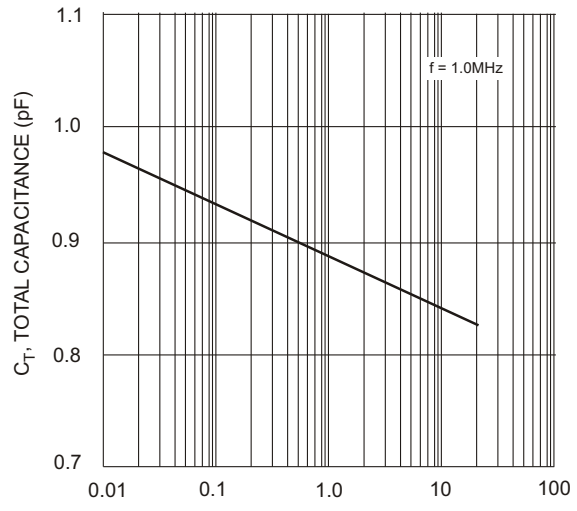


Fig. 4 Typical Total Capacitance vs. Reverse Voltage, per element

IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.