



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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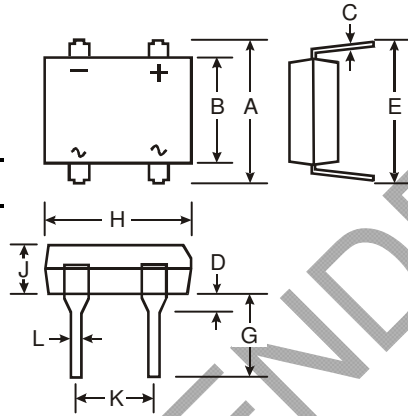


Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 50A Peak
- Designed for Printed Circuit Board Applications
- UL Listed Under Recognized Component Index, File Number E94661
- **Lead Free Finish, RoHS Compliant (Date Code 0532+)** (Note 3)

Mechanical Data

- Case: DF-M
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish — Tin. Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Marking: Type Number
- Weight: 0.38 grams (approximate)



DF-M		
Dim	Min	Max
A	7.40	7.90
B	6.20	6.50
C	0.22	0.30
D	1.27	2.03
E	7.60	8.90
G	3.81	4.69
H	8.13	8.51
J	2.40	3.40
K	5.00	5.20
L	0.46	0.58
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

 @T_A = 25°C unless otherwise specified

 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristic	Symbol	DF 15005M	DF 1501M	DF 1502M	DF 1504M	DF 1506M	DF 1508M	DF 1510M	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T _A = 40°C	I _O	1.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	50							A
Forward Voltage (per element) @ I _F = 1.5A	V _{FM}	1.1							V
Peak Reverse Current @ T _A = 25°C	I _{RM}	10							μA
at Rated DC Blocking Voltage @ T _A = 125°C		500							
I ² t Rating for Fusing (t<8.3ms)	I ² t	10.4							A ² s
Typical Total Capacitance (Note 2)	C _T	25							pF
Typical Thermal Resistance Junction to Ambient	R _{θJA}	40							°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C

- Notes:
1. Thermal resistance from junction to ambient mounted on PC board with 13 x 13mm (0.03mm thick) land areas.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 3. RoHS revision 13.2.2003. Glass and high temperature solder exemptions applied, see EU Directive Annex Notes 5 and 7.

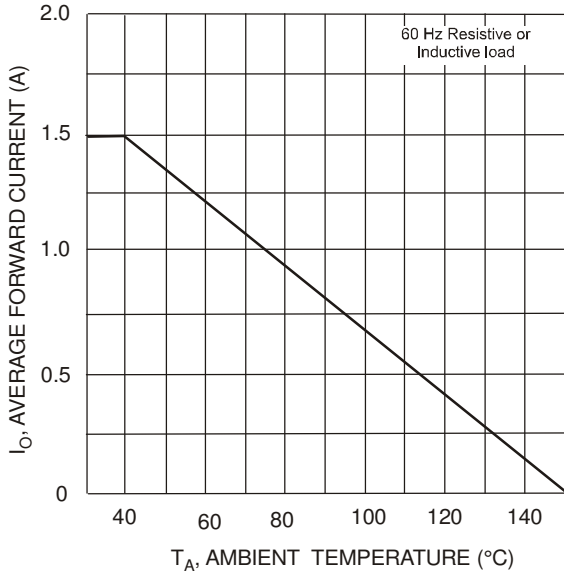


Fig. 1 Output Current Derating Curve

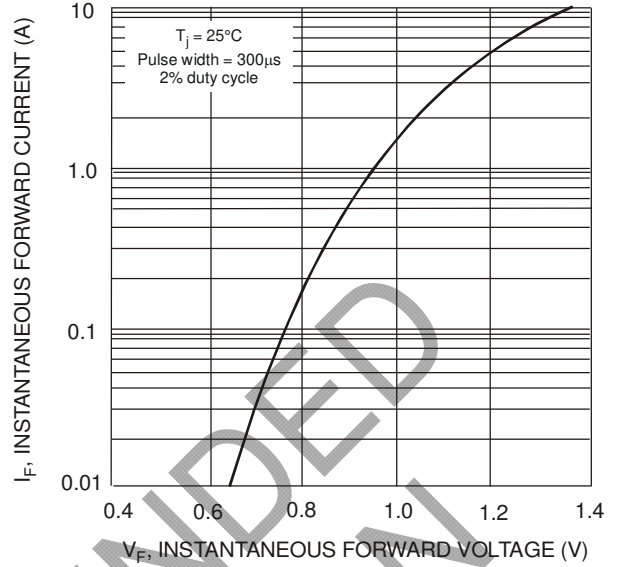


Fig. 2 Typical Forward Characteristics (per element)

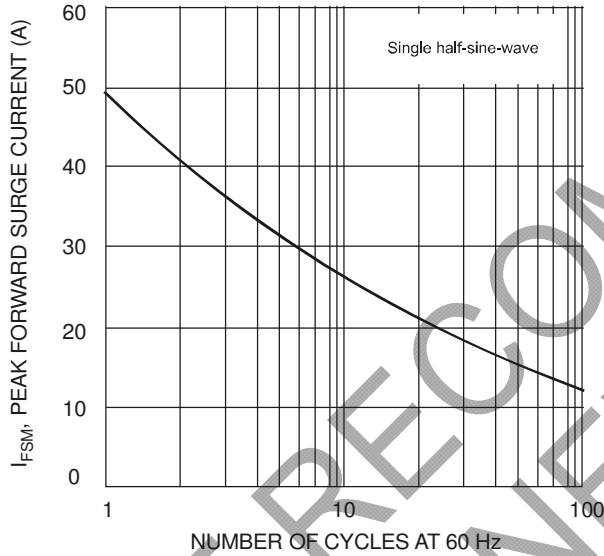


Fig. 3 Max Non-Repetitive Peak Forward Surge Current

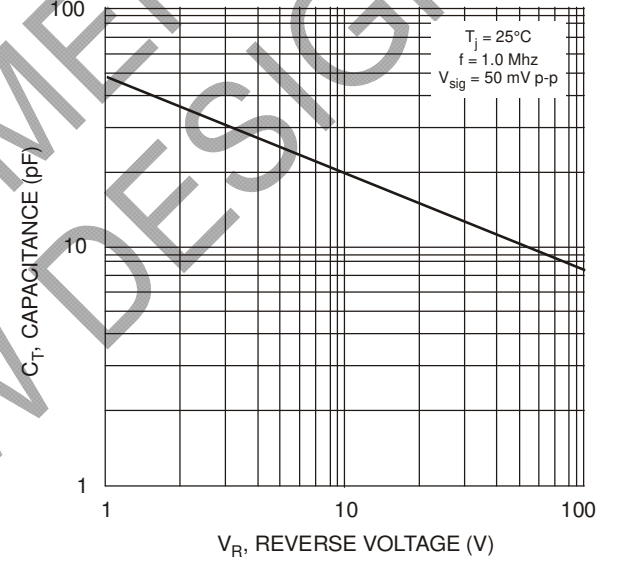


Fig. 4 Typical Total Capacitance (per element)

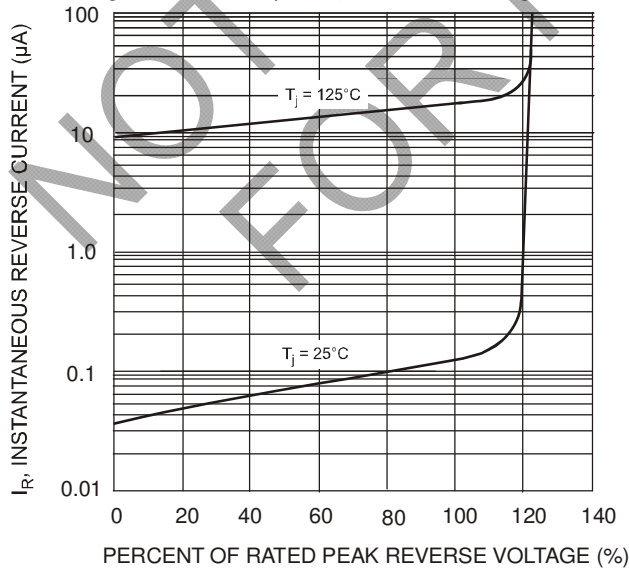


Fig. 5 Typical Reverse Characteristics (per element)

Ordering Information (Note 4)

Device	Packaging	Shipping
DF15xxM	DF-M	50 per Tube

Notes: 4. For packaging details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

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