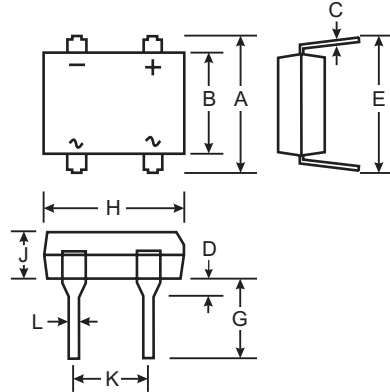


Features

- 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)



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		

Mechanical Data

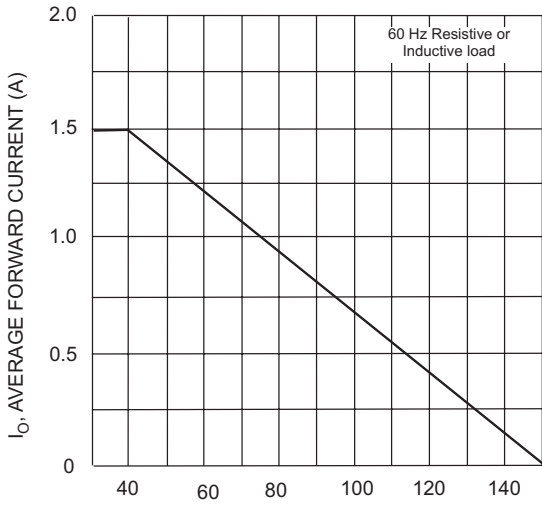
- Case: DF-M
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish - Tin. Solderable per MIL-STD-202, Method 208 (E3)
- Polarity: As Marked on Case
- Marking: Type Number
- Weight: 0.38 grams (approximate)

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

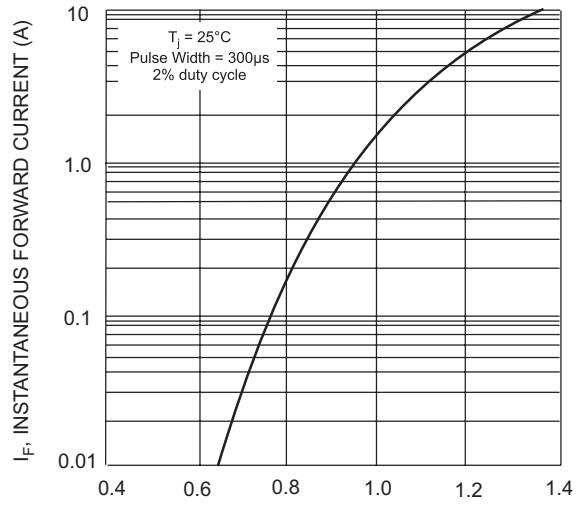
Single phase, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	DF 15005M	DF 1501M	DF 1502M	DF 1504M	DF 1506M	DF 1508M	DF 1510M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
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 at Rated DC Blocking Voltage @ T _A = 125°C	I _{RM}	10 500							μA
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

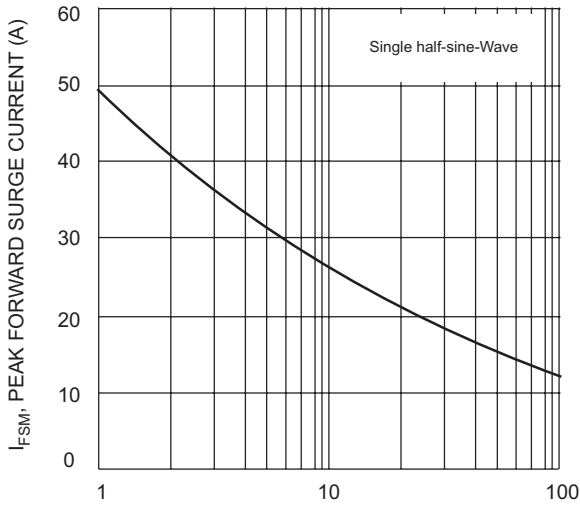
- Notes:
1. Thermal resistance from junction to ambient mounted on PC board with 13 x 13mm (0.03mm thick) land areas.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.



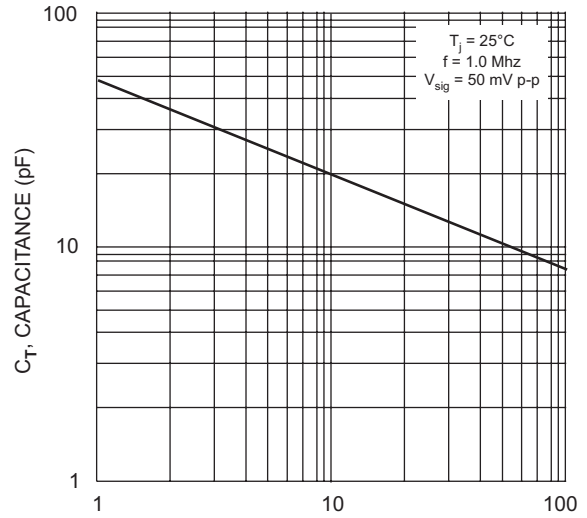
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Output Current Derating Curve



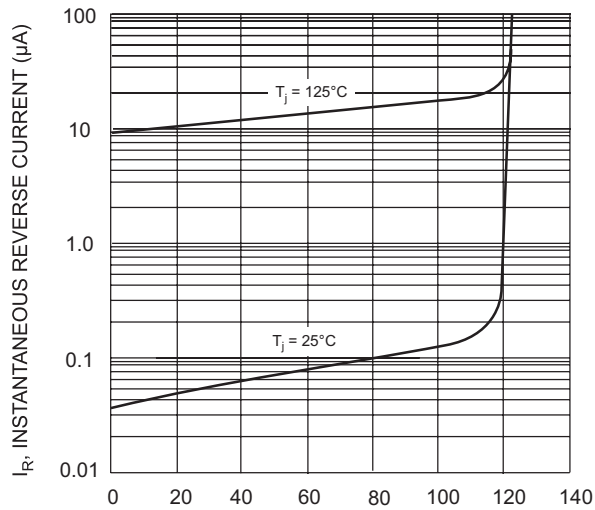
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typ Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Forward Surge Current



V_R , REVERSE VOLTAGE (V)
Fig. 4 Typ Total Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typ 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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