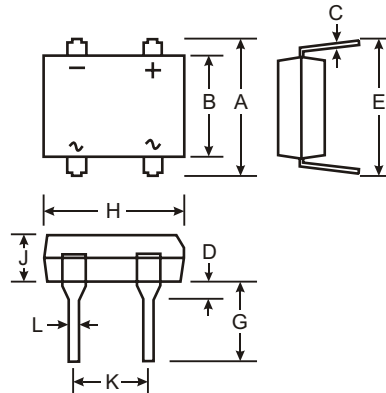


Features

- Glass Passivated Die Construction
- Diffused Junction
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 50A Peak
- Designed for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0
- UL Listed Under Recognized Component Index, File Number E94661

Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated Leads, Solderable per MIL-STD-202, Method 208
- Also Available in Lead Free Plating (Matte Tin Finish). Please see Ordering Information, Note 4, on Page 3
- Polarity: As Marked on Case
- Approx. Weight: 0.38 grams
- Mounting Position: Any
- Marking: Type Number



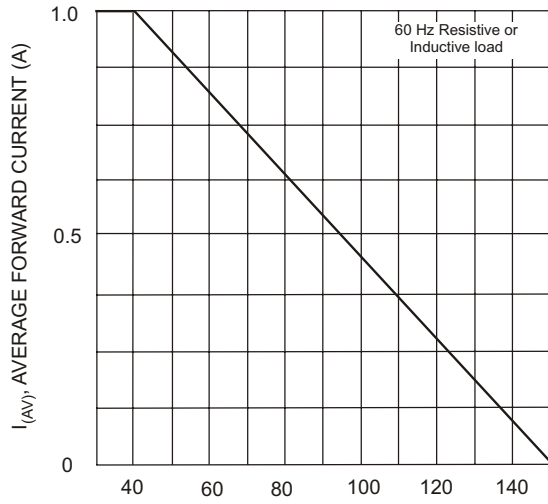
DF-M		
Dim	Min	Max
A	7.40	7.90
B	6.20	6.50
C	0.22	0.30
D	1.27	2.03
E	7.60	8.90
G	3.81	4.69
H	8.13	8.51
J	2.40	2.60
K	5.00	5.20
L	0.46	0.58
M	1.40	1.56
N	2.10	2.34
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

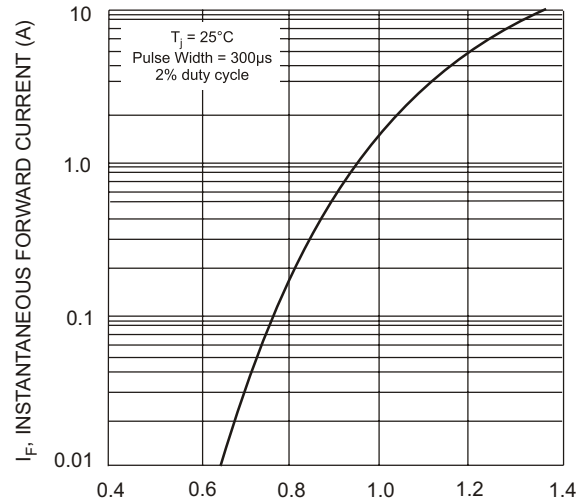
Single phase, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristic	Symbol	DF 005M	DF 01M	DF 02M	DF 04M	DF 06M	DF 08M	DF 10M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RMM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	580	700	V
Average Rectified Output Current @ $T_A = 40^\circ\text{C}$	I_O	1.0							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							A
Forward Voltage (per element) @ $I_F = 1.0\text{ A}$	V_{FM}	1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage (per element) @ $T_A = 125^\circ\text{C}$	I_{RM}	10 500							μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10.4							A^2s
Typical Total Capacitance per element (Note 1)	C_T	25							pF
Typical Thermal Resistance, Junction to Ambient (Note 2)	$R_{\theta JA}$	40							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							$^\circ\text{C}$

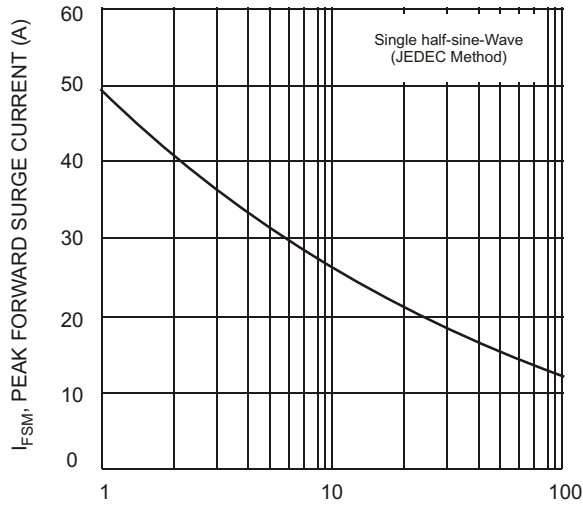
Notes: 1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
 2. Thermal Resistance, junction to ambient, measured on PC board with 5.0²mm (0.03mm thick) land areas.



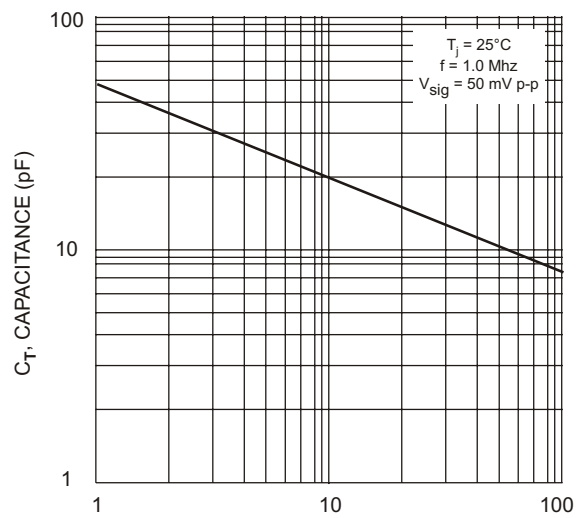
T_A , AMBIENT TEMPERATURE ($^{\circ}$ C)
Fig. 1 Output Current Derating Curve



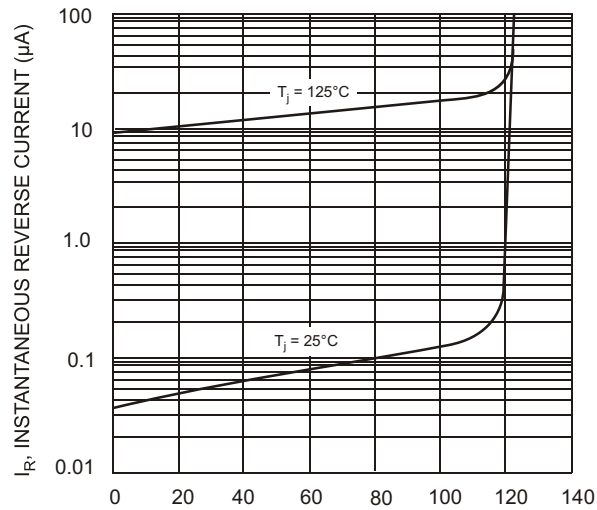
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typ Forward Characteristics (per element)



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



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



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typ Reverse Characteristics (per element)

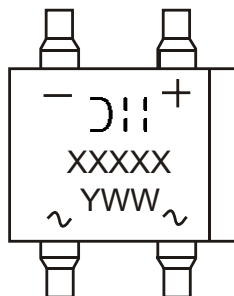
Ordering Information (Notes 3 & 4)

Device*	Packaging	Shipping
DFxM DFxM-T	DF-M DF-M	Tube 1500/Tape & Reel, 13-inch

* x = Device type, e.g. DF005S or DF10S, etc.

Notes: 3. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.
4. For lead free terminal plating part number, please add "-F" suffix to part number above. Example: DF10M-T-F.

Marking Information



DI = Manufacturers' code marking
XXXXX = Product type marking code, ex: DF10M
YWW = Date code marking
Y = Last digit of year ex: 2 for 2002
WW = Week code 01 to 52