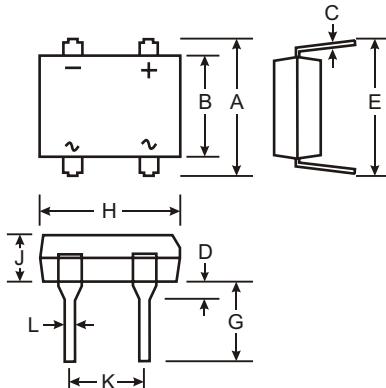


Features

- 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
- 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	V_{RMM}								
Working Peak Reverse Voltage	V_{RWMM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R								
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 Junction Capacitance per element (Note 1)	C_J				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 5.0 ^2mm (0.03mm thick) land areas.

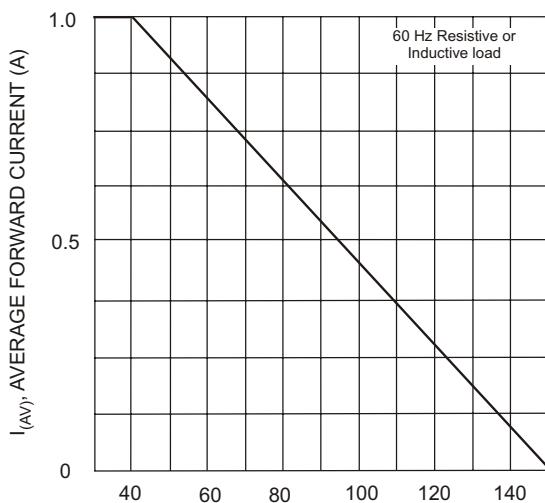


Fig. 1 Output Current Derating Curve

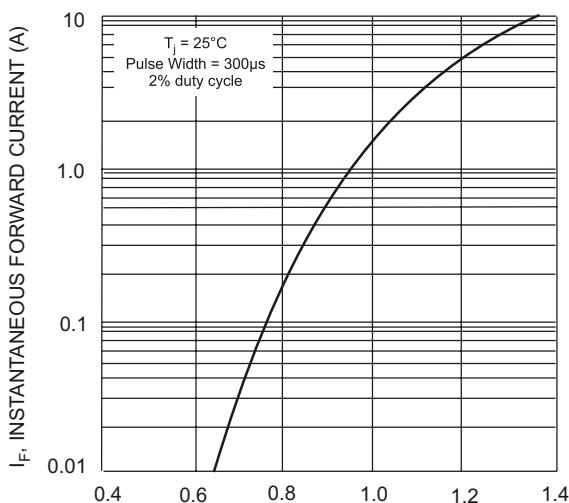


Fig. 2 Typ Forward Characteristics (per element)

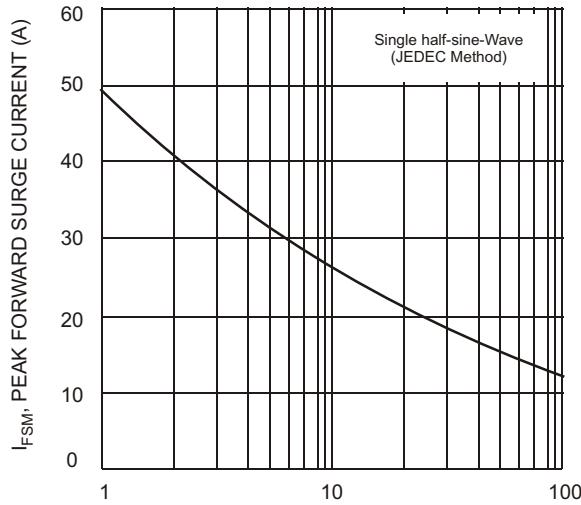


Fig. 3 Max Non-Repetitive Peak Forward Surge Current

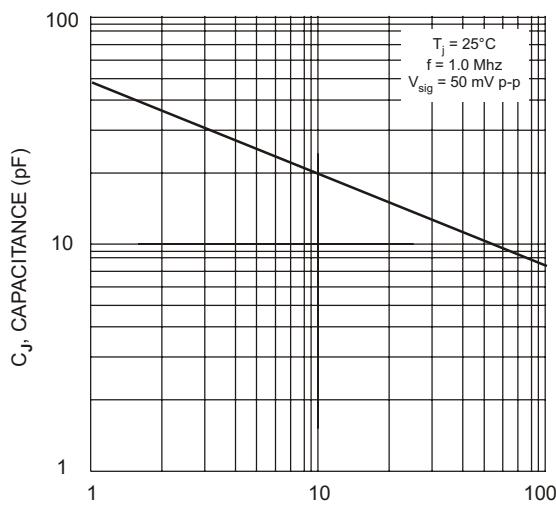


Fig. 4 Typ Junction Capacitance (per element)

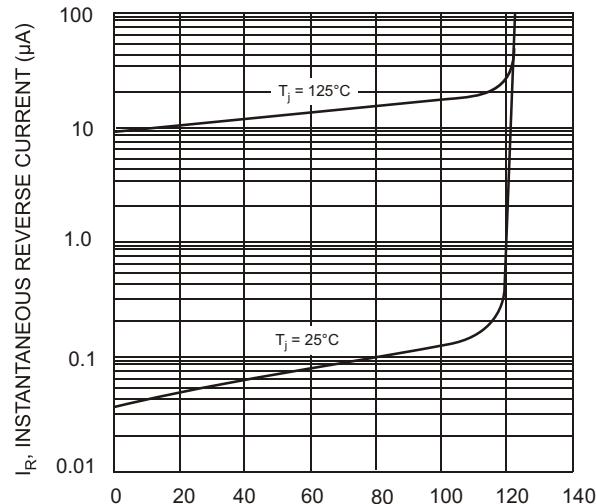


Fig. 5 Typ Reverse Characteristics (per element)