DF005 - DF10

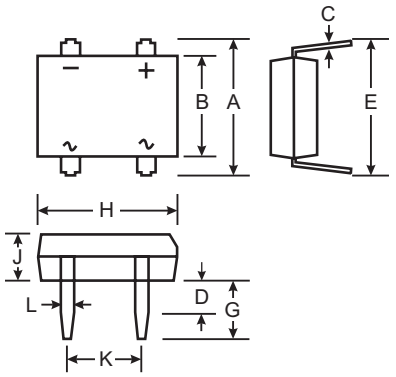
1.0A BRIDGE RECTIFIER

Features

- 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 E95060

Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.38 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DF-1		
DIM	**Min**	**Max**
A	7.4	7.9
B	6.2	6.5
C	0.22	0.30
D	1.27	2.03
E	7.6	8.9
G	3.81	4.69
H	8.1	9.3
J	2.4	3.4
K	5.0	5.2
L	0.46	0.58
All Dimensions in mm		

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

Characteristic	Symbol	DF005	DF01	DF02	DF04	DF06	DF08	DF10	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_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T_A = 40°C	I_O	1.0							A
Non-Repetive Peak Forward Surge Current, 8.3 single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Forward Voltage (per element) @ I_F = 1.0A	V_{FM}	1.1							V
Peak Reverse Current @ T_A = 25°C at Rated DC Blocking Voltage (per element) @T_A = 125°C	I_{RM}	10 0.5							μA mA
I^2t Rating for Fusing (t < 8.3ms)	I^2t	10.4							A^2s
Typical Thermal Resistance, Junction to Ambient (Note 2)	$R_{\theta JA}$	110							K/W
Junction Storage and Operating Temperature Range	T_j, T_{STG}	-65 to +150							°C

Notes: 1. 60 Hz resistive or inductive load.
2. Thermal Resistance, Junction to Ambient, measured on PC board with 5.0^2mm (0.03mm thick) land areas.

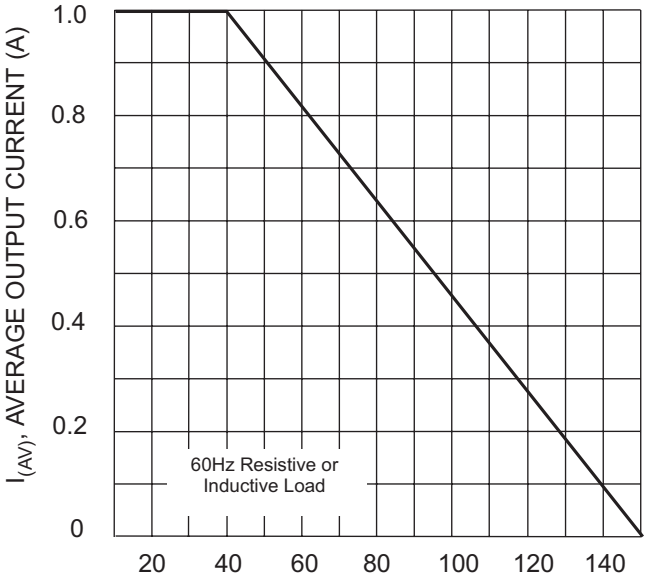


Fig. 1 Maximum Output Derating Curve

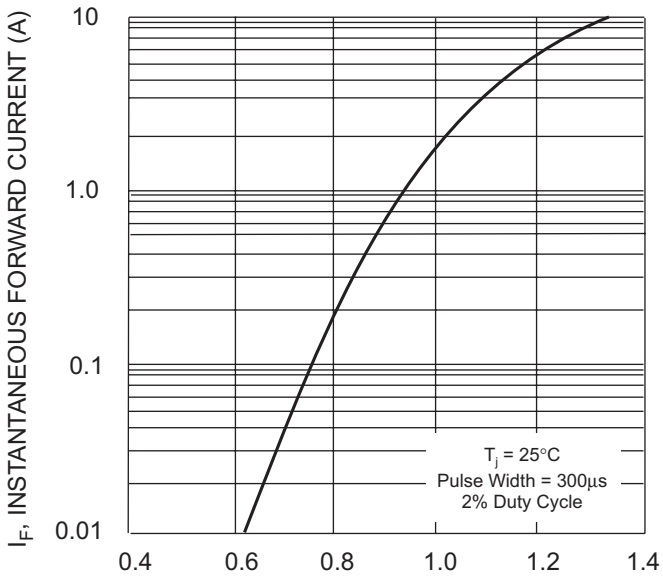


Fig. 2 Typical Forward Characteristics (per element)

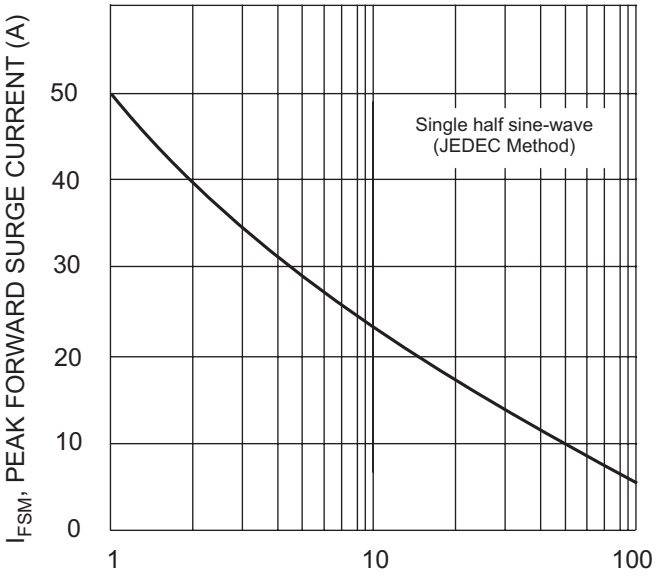


Fig. 3 Max Non-Repetitive Peak Forward Surge Current

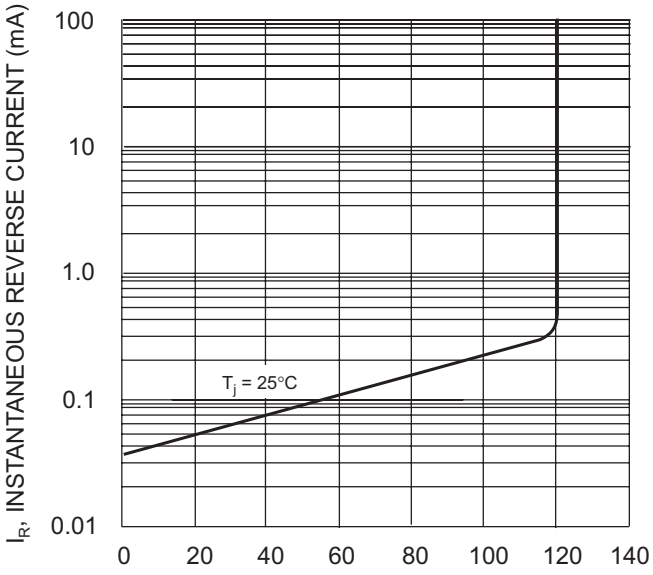


Fig. 4 Typical Reverse Characteristics (per element)