
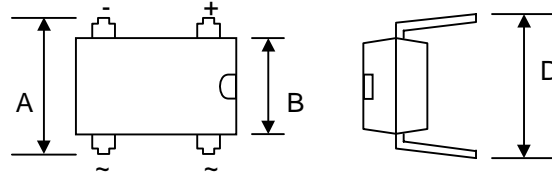


## 1.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

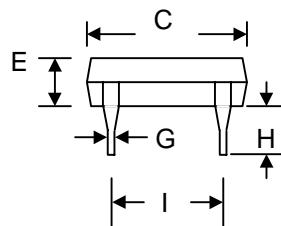
### Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Ideal for Printed Circuit Boards
-  Recognized File # E157705



### Mechanical Data

- Case: DIL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 1.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



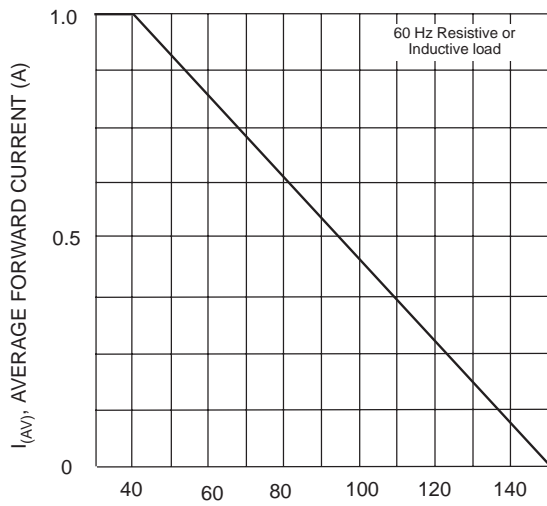
DIL		
Dim	Min	Max
A	7.30	7.90
B	6.10	6.50
C	8.03	8.51
D	7.60	8.90
E	2.20	2.60
G	0.45	0.55
H	3.80	4.90
I	5.00	5.20
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

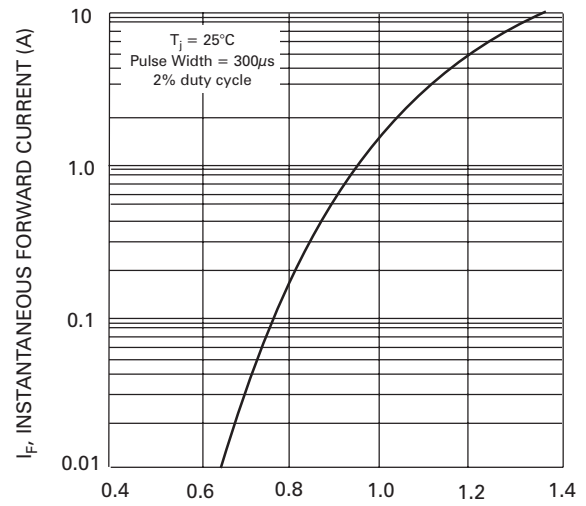
Single Phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

Characteristic	Symbol	DF005	DF01	DF02	DF04	DF06	DF08	DF10	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>								
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V <sub>R</sub>								
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @T <sub>A</sub> = 40°C	I <sub>O</sub>	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50							A
Forward Voltage per element @I <sub>F</sub> = 1.0A	V <sub>FM</sub>	1.1							V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 125°C	I <sub>RM</sub>	5.0 500							μA
Typical Junction Capacitance per element (Note 1)	C <sub>j</sub>	25							pF
Typical Thermal Resistance per leg (Note 2)	R <sub>θJA</sub> R <sub>θJL</sub>	40 15							°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +150							°C

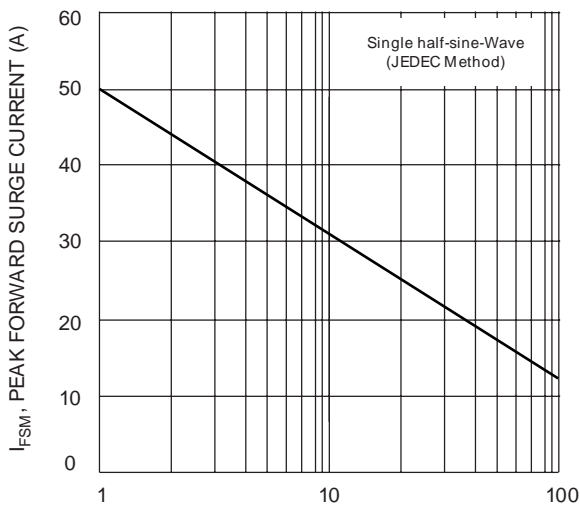
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
 2. Mounted on PC board with 13mm<sup>2</sup> copper pad.



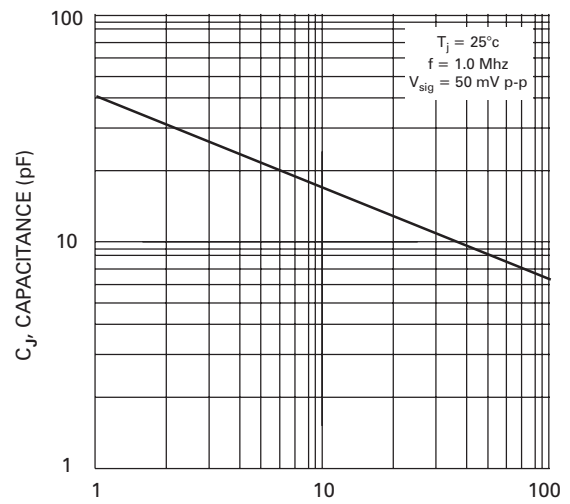
$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1 Output Current Derating Curve



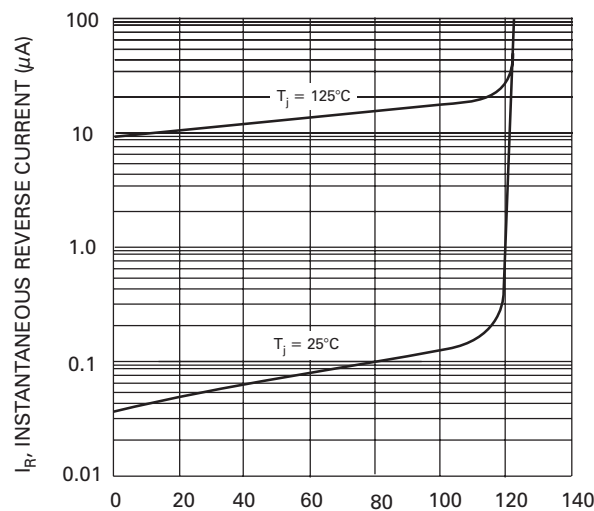
$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typ Forward Characteristics (per element)



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

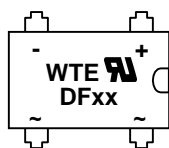


$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typ Junction Capacitance (per element)



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

## MARKING INFORMATION



WTE = Manufacturer's Logo  
DFxx = Device Number  
xx = 005, 01, 02, 04, 06, 08, 10  
Polarity = As Marked on Body

## PACKAGING INFORMATION

### BULK

Tube Size L x W x H (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
420 x 12 x 10	50	470 x 145 x 75	2,500	495 x 245 x 180	7,500	6.0

**Note:** 1. Anti-static tube, water clear color.

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
DF005	DIL Bridge	50 Units/Tube
DF01	DIL Bridge	50 Units/Tube
DF02	DIL Bridge	50 Units/Tube
DF04	DIL Bridge	50 Units/Tube
DF06	DIL Bridge	50 Units/Tube
DF08	DIL Bridge	50 Units/Tube
DF10	DIL Bridge	50 Units/Tube

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add “-LF” suffix to part number above. For example, DF005-LF.**

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**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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