
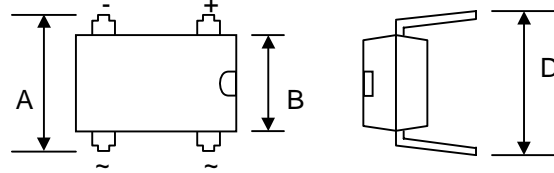


## 1.5A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

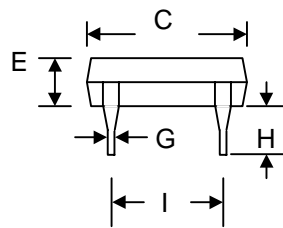
### Features

- 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**



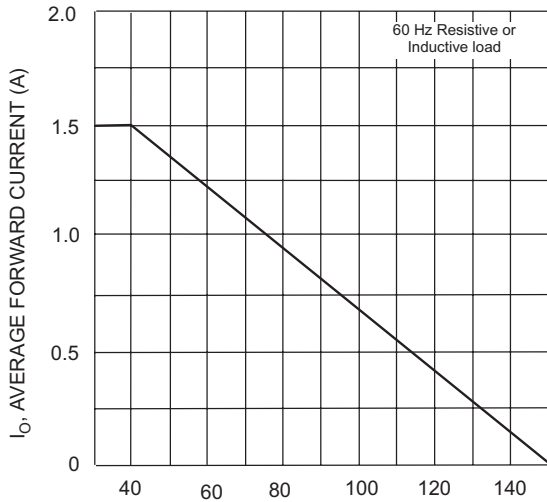
DIL		
Dim	Min	Max
A	7.30	7.90
B	6.10	6.50
C	8.03	8.51
D	7.60	8.90
E	2.20	2.60
G	0.45	0.55
H	3.80	4.90
I	5.00	5.20
All Dimensions in mm		

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

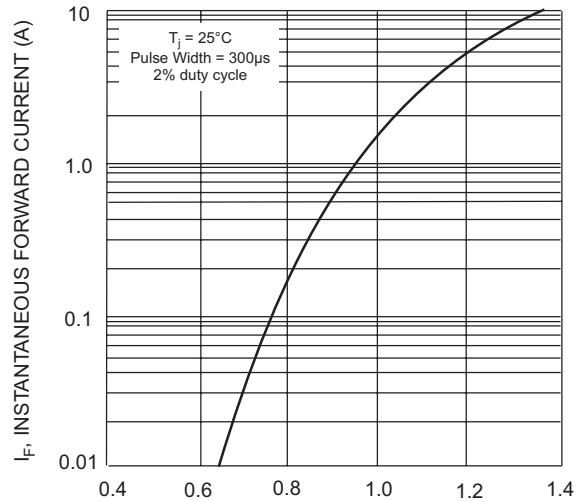
Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	DF150	DF151	DF152	DF154	DF156	DF158	DF1510	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$								
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_A = 40^\circ\text{C}$	$I_O$	1.5							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50							A
Forward Voltage per element @ $I_F = 1.5\text{A}$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_{RM}$	5.0 500							$\mu\text{A}$
Typical Junction Capacitance per element (Note 1)	$C_j$	25							pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	40 15							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150							$^\circ\text{C}$

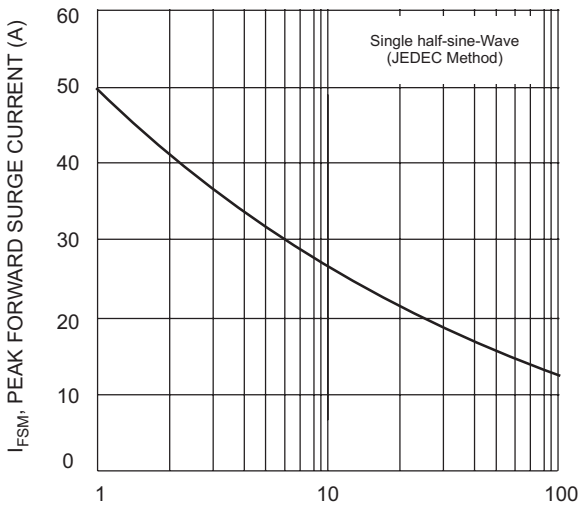
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
2. Mounted on PC board with 13mm<sup>2</sup> copper pad.



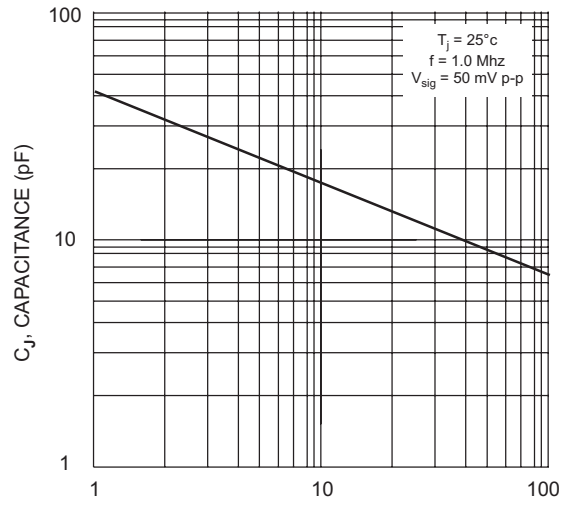
$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1 Output Current Derating Curve



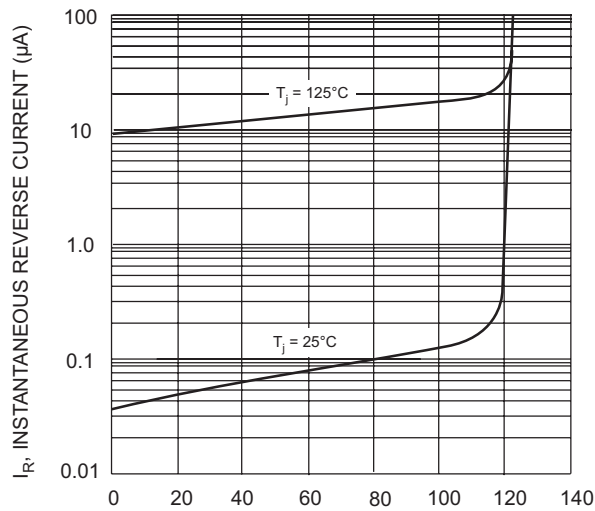
$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typ Forward Characteristics (per element)



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

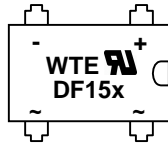


$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typ Junction Capacitance (per element)



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

## MARKING INFORMATION



WTE = Manufacturer's Logo  
 DF15x = Device Number  
 x = 0, 1, 2, 4, 6, 8, 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
DF150	DIL Bridge	50 Units/Tube
DF151	DIL Bridge	50 Units/Tube
DF152	DIL Bridge	50 Units/Tube
DF154	DIL Bridge	50 Units/Tube
DF156	DIL Bridge	50 Units/Tube
DF158	DIL Bridge	50 Units/Tube
DF1510	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, DF150-LF.**

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**Won-Top Electronics Co., Ltd.**

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

**Phone:** 886-7-822-5408 or 886-7-822-5410

**Fax:** 886-7-822-5417

**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

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