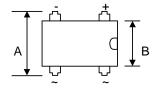


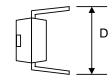


#### 1.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

#### **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

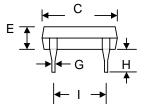
Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

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			
Α	7.30	7.90			
В	6.10	6.50			
С	8.03	8.51			
D	7.60	8.90			
Е	2.20	2.60			
G	0.45	0.55			
Н	3.80	4.90			
ı	5.00	5.20			
All Dimensions in mm					

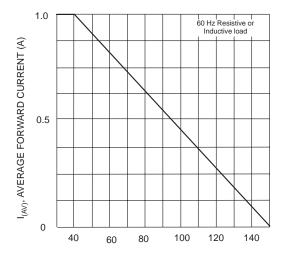
# Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

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

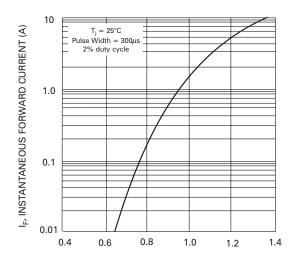
Characteristic	Symbol	DF005	DF01	DF02	DF04	DF06	DF08	DF10	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	٧
Average Rectified Output Current @T <sub>A</sub> = 40°C	lo	1.0						Α	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	50						А	
Forward Voltage per element @I <sub>F</sub> = 1.0A	VFM	1.1						V	
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 125^{\circ}C$	IRM	5.0 500						μА	
Typical Junction Capacitance per element (Note 1)	Cj	25						pF	
Typical Thermal Resistance per leg (Note 2)	RθJA RθJL	40 15						°C/W	
Operating and Storage Temperature Range	Тј, Тѕтс			-:	55 to +15	50			°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

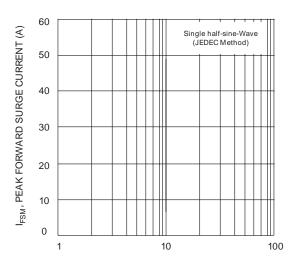
2. Mounted on PC board with 13mm<sup>2</sup> copper pad.



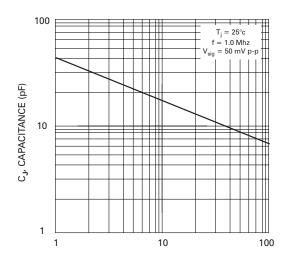
T<sub>A</sub>, AMBIENT TEMPERATURE (°C) Fig. 1 Output Current Derating Curve



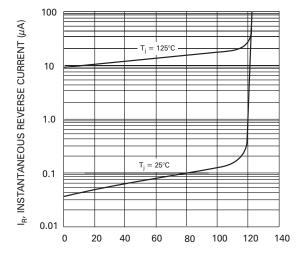
V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typ Forward Characteristics (per element)



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

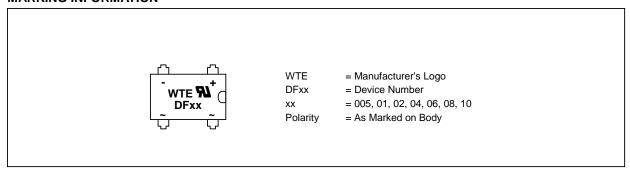


 $\label{eq:VR} {\rm V_{R},\,REVERSE\,\,VOLTAGE\,\,(V)}$  Fig. 4 Typ Junction Capacitance (per element)



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

# MARKING INFORMATION



# **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

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- 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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