

# DF06M – DF10M(LS)

## GLASS PASSIVATED BRIDGE RECTIFIERS

**REVERSE VOLTAGE – 600 to 1000 Volts  
FORWARD CURRENT – 1 Amperes**

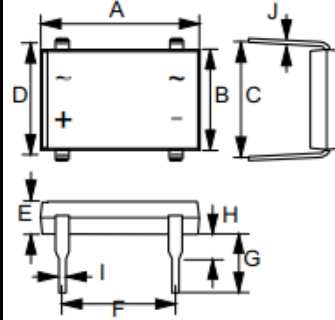
### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0
- UL recognition file # E364304
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

### MECHANICAL DATA

- Package: DF-M
- Polarity indicator: As marked on the body
- Weight: 0.02 ounces, 0.38 grams
- Mounting position: Any

### DF



DF		
DIM.	MIN.	MAX.
A	8.20	8.50
B	6.20	6.50
C	7.60	8.90
D	7.40	7.60
E	2.40	2.60
F	5.00	5.20
G	4.10	4.60
H	1.27	2.03
I	0.46	0.56
J	0.22	0.30

All Dimensions in millimeter

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

## ABSOLUTE RATINGS

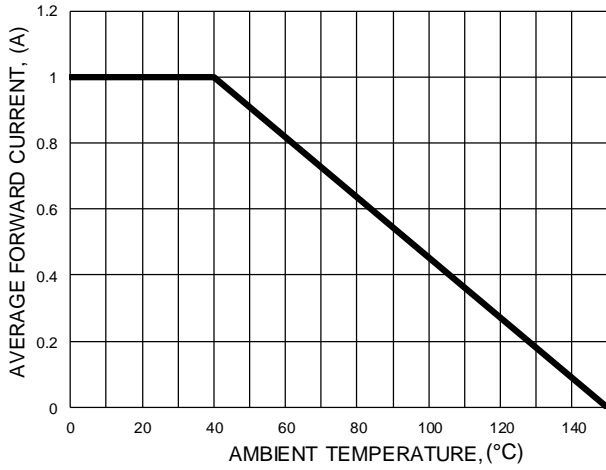
PARAMETER	SYMBOL	DF06M	DF08M	DF10M	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	600	800	1000	V
Maximum Average Rectified Output Current @TA =40°C @Tc =120°C	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave	$I_{FSM}$	50			A
$I^2t$ Rating for fusing ( t = 8.3ms)	$I^2t$	10.4			A <sup>2</sup> S
Maximum Forward Voltage at 1.0A DC	$V_F$	1.1			V
Maximum DC Reverse Current @TJ =25°C at Rated DC Blocking Voltage @TJ=125°C	$I_R$	10 500			µA
Typical Junction Capacitance per element (Note 4)	$C_J$	25			pF
Typical Thermal Resistance (Note 5)	$RO_{JA}$	40			°C/W
Operating Temperature Range	$T_J$	-55 to +150			°C
Storage Temperature Range	$T_{STG}$	-55 to +150			°C

### Notes:

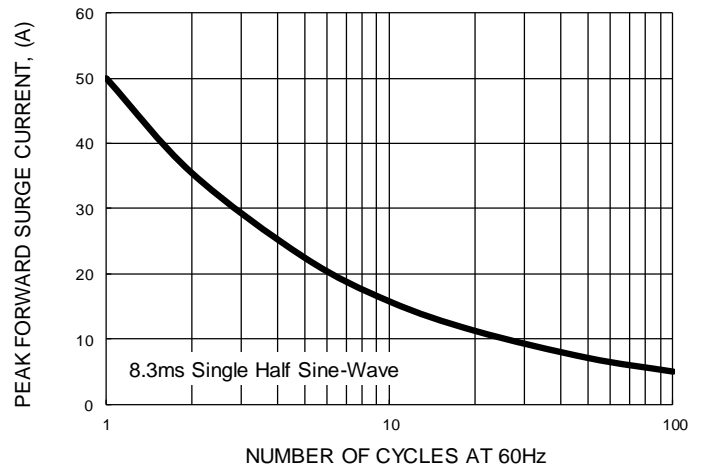
1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
5. Thermal resistance from junction to ambient mounted on P.C.B with 0.5x0.5" (13x13mm) cooper pads.

**RATING AND CHARACTERISTIC CURVES  
DF06M – DF10M**

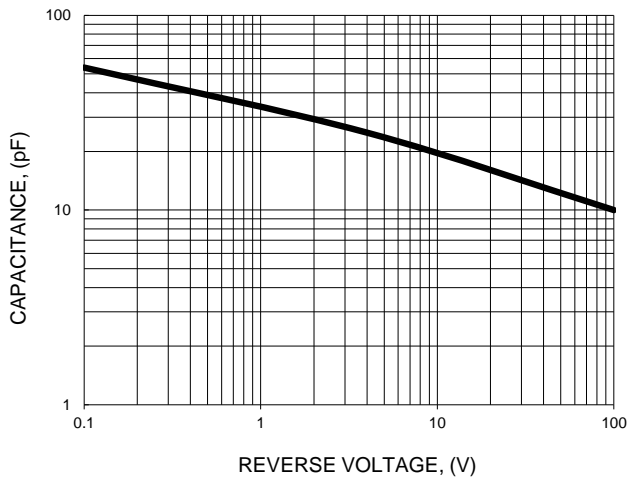
**FIG.1- FORWARD CURRENT DERATING CURVE**



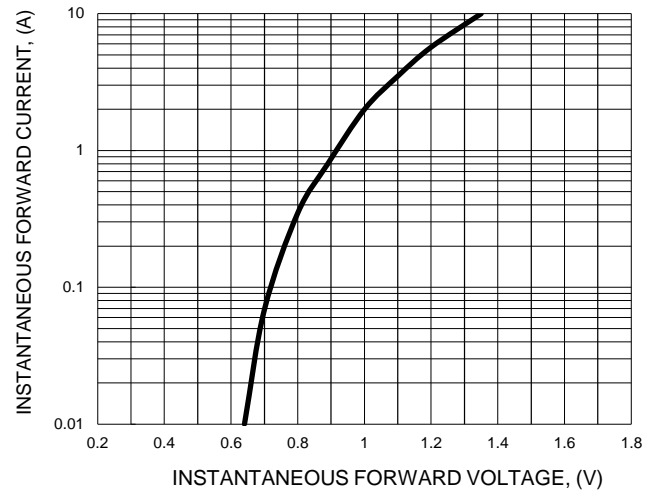
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



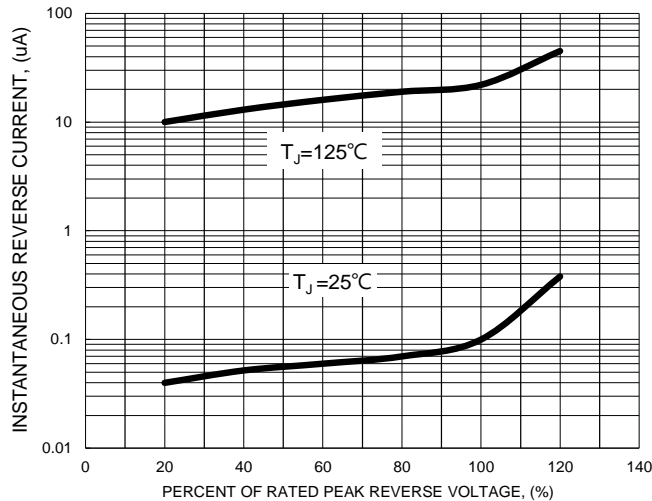
**FIG.3- TYPICAL JUNCTION CAPACITANCE**



**FIG.4- TYPICAL FORWARD CHARACTERISTICS**



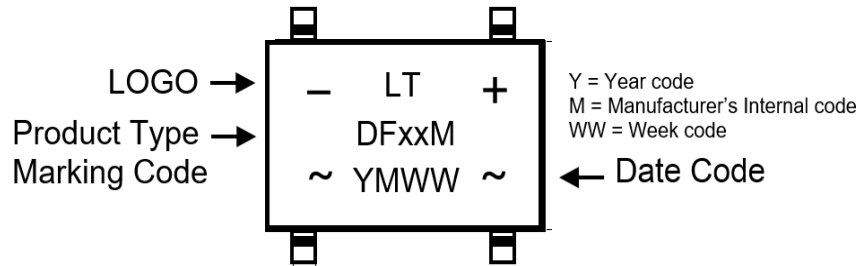
**FIG.5- TYPICAL REVERSE CHARACTERISTICS**



**Ordering Information:**

Part Number	Package	Packing	
		Qty.	Carrier
DF06M_HF	DF-M	50Pcs	Tube
DF08M_HF	DF-M	50Pcs	Tube
DF10M_HF	DF-M	50Pcs	Tube

**Marking Information:**



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