

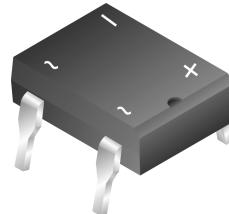


DF005M - DF10M

DF005M - DF10M

Features

- Surge overload rating: 50 amperes peak.
- Glass passivated junction.
- Low leakage.
- UL certified, UL #E111753.



DIP

Bridge Rectifiers

Absolute Maximum Ratings*

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value							Units
		005M	01M	02M	04M	06M	08M	10M	
V_{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V_{RMS}	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V_R	DC Reverse Voltage (Rated V_R)	50	100	200	400	600	800	1000	V
$I_{F(AV)}$	Average Rectified Forward Current, @ $T_A = 40^\circ\text{C}$					1.5			A
I_{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave				50				A
T_{stg}	Storage Temperature Range				-55 to +150				$^\circ\text{C}$
T_J	Operating Junction Temperature				-55 to +150				$^\circ\text{C}$

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

Symbol	Parameter	Value		Units
P_D	Power Dissipation	3.1		W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,* per leg	40		$^\circ\text{C}/\text{W}$

*Device mounted on PCB with 0.5 x 0.5" (13 x 13 mm).

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Device		Units
V_F	Forward Voltage, per bridge @ 1.0 A	1.1		V
I_R	Reverse Current, total bridge @ rated V_R $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	5.0	500	μA
	I^2t rating for fusing $t < 8.35$ ms	10		A^2s
C_T	Total Capacitance, per leg $V_R = 4.0$ V, $f = 1.0$ MHz	25		pF

Typical Characteristics

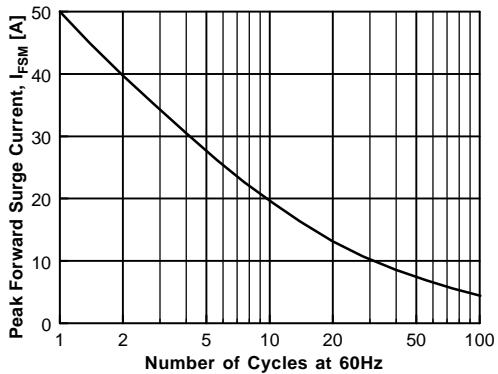


Figure 1. Non-Repetitive Surge Current

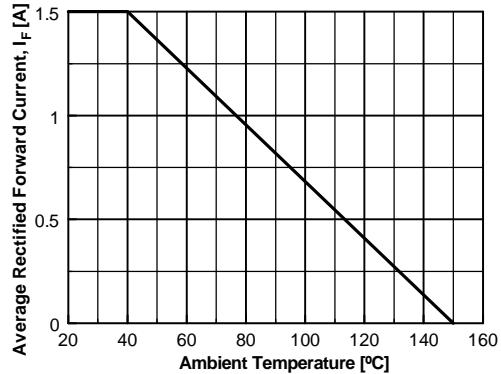


Figure 2. Forward Current Derating Curve

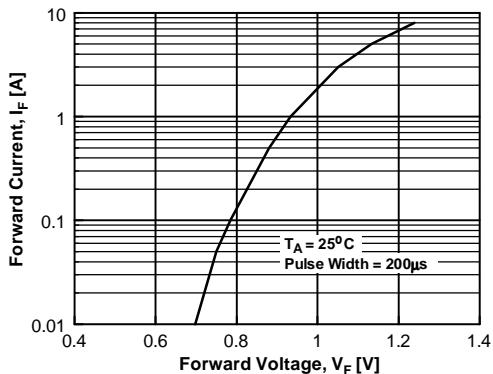


Figure 3. Forward Voltage Characteristics

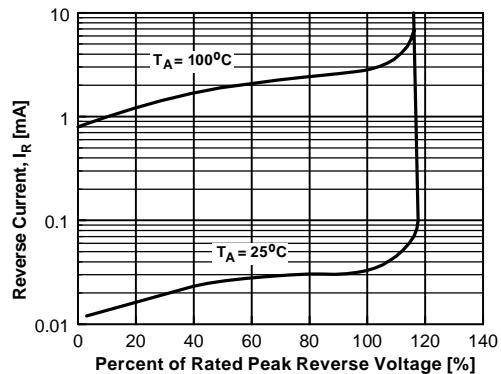


Figure 4. Reverse Current vs Reverse Voltage

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