

Single-Phase Bridge Rectifiers

DF005M-G thru DF10M-G

Reverse Voltage: 50 to 1000V

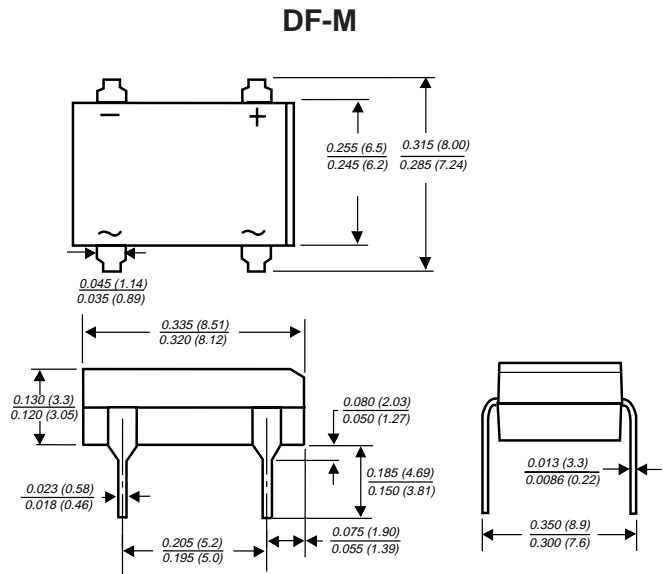
Forward Current: 1.0A

Features

- Plastic package used has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High surge overload rating of 50 Amperes peak
- High temperature soldering guaranteed: 260°C/10 seconds, at 5 lbs. (2.3kg) tension

Mechanical Data

- Case: Molded plastic body over passivated junctions
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Mounting Position: Any
- Weight: 0.014 oz., 0.4 g



Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	DF 005M-G	DF 01M-G	DF 02M-G	DF 04M-G	DF 06M-G	DF 08M-G	DF 10M-G	Unit
Device Marking Code		DF005	DF01	DF02	DF04	DF06	DF08	DF10	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Max. average forward output rectified current at $T_A=40^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	10							A ² sec
Typical thermal resistance per leg (NOTE 1)	$R_{\theta JA}$ $R_{\theta JL}$	40 15							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	DF 005M-G	DF 01M-G	DF 02M-G	DF 04M-G	DF 06M-G	DF 08M-G	DF 10M-G	Unit
Maximum instantaneous forward voltage drop per leg at 1.0A	V_F	1.1							V
Maximum reverse current at rated DC blocking voltage per leg	I_R	5.0 500							μA
Typical junction capacitance per leg at 4.0V, 1MHz	C_J	25							pF

Note: (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

