

DF005 THRU DF10

GLASS PASSIVATED CHIP SINGLE-PHASE BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts

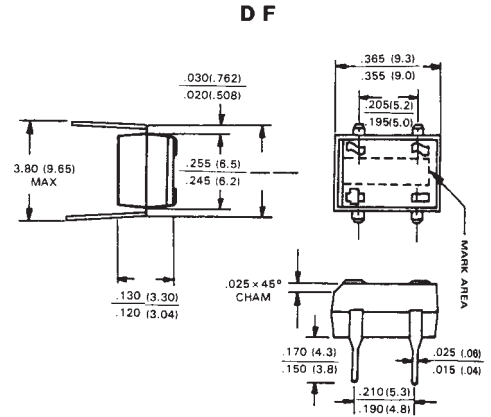
Forward Current - 1.0 Ampere

Features

- Ideal for printed circuit board
- Glass passivated chip junction
- High temperature soldering guaranteed:
260°C/10 seconds at 5 lbs tension

Mechanical Data

- **Terminals:** Plated leads, solderable per MIL-STD-202, method 208
- **Case:** Molded with UL-94Class V-0 recognized flame retardant epoxy
- **Polarity:** Polarity symbol marked on body
- **Mounting Position:** Any



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Single-phase, half-wave, 60Hz, resistive or inductive load.

Ratings at 25°C, unless otherwise stated.

For capacitive load, Derate current by 20%.

Characteristic	Symbols	DF005	DF01	DF02	DF04	DF06	DF08	DF10	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_A = 40^\circ\text{C}$	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load	I_{FSM}	50.0							Amps
Maximum forward voltage at forward current per element 1.0A	V_F	1.1							Volts
I^2t -rating for fusion ($t < 8.3\text{mS}$)	I^2t	10.0							A^2S
Maximum DC reverse current at rated DC blocking voltage	I_R	10.0 500.0							μA
Typical junction capacitance (Note 1)	C_J	25.0							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	40.0							$^\circ\text{C/W}$
Operating temperature range	T_J	-55 to +125							$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150							$^\circ\text{C}$

Notes:

(1) Measured at 1.0MHz and applied reverse voltage of 4.0 VDC

(2) Thermal resistance from junction to ambient on P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES

