

## SHANGHAI SUNRISE ELECTRONICS CO., LTD.

# **DF005 THRU DF10**SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

TECHNICAL SPECIFICATION

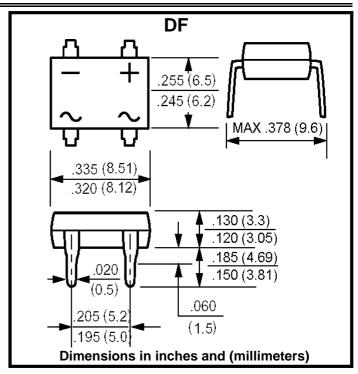
VOLTAGE: 50 TO 1000V CURRENT: 1.0A

#### **FEATURES**

- · Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 50 A peak
- High temperature soldering guaranteed: 250°C/10sec/ at terminals

#### **MECHANICAL DATA**

- Terminal: Plated leads solderable per MIL-STD 202E, method 208C
- Case: UL-94 Class V-O recognized flame retardant epoxy
- Polarity: Polarity symbol marked on body
- Mounting position: Any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

RATINGS	SYMBOL	DF 005	DF 01	DF 02	DF 04	DF 06	DF 08	DF 10	UNITS
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
Maximum Average Forward Rectified Current (T <sub>a</sub> =40°C)	I <sub>F(AV)</sub>	1.0							Α
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	I <sub>FSM</sub>	50							А
Maximum Instantaneous Forward Voltage (at forward current 1.0A)	$V_{F}$	1.1							V
Maximum DC Reverse Current T <sub>a</sub> =25°C		10.0							μΑ
(at rated DC blocking voltage) T <sub>a</sub> =125°C	I <sub>R</sub>	500							μΑ
Typical Junction capacitance (Note 1)	$C_{J}$	25							pF
Typical Thermal Resistance (Note 2)	R <sub>θ</sub> (Ja)	40							°C/W
Storage and Operating Junction Temperature	$T_{STG},T_{J}$	-55 to +150							°C

- Note:
  - 1. Measured at 1.0 MHz and applied voltage of 4.0 V<sub>dc</sub>
  - 2. Thermal Resistance from junction to Ambient mounted on P.C. Board with 13x13mm copper pads.