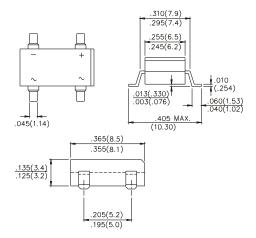
## DF005S thru DF10S

#### SINGLE-PHASE GLASS PASSIVATED SMD BRIDGE RECTIFIERS

#### **VOLTAGE - 50 TO 1000 VOLTS CURRENT - 1.0 AMPERES**





Dimensions in inches and (millimeters)

### **FEATURES**

- · Glass passivated JUNCTION
- · Surge overload rating to 50 amperes peak
- · Ldeal for printed circuit board applications
- · Low Forward Voltage drop
- Reliable low cost construction utilizing molded Plastic technique
- Plastic PACKAGE HAS underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering guaranteed : 260°C/10seconds at 5lbs. (2.3kg) tension

### MECHANICAL DATA

Case: Molded plastic body over passivated junction

Terminals: Plated lead, solderable per MIL-STD-202, Method 208

Polarity: Polarity symbols marked on body

Weight: 0.04 ounce, 1.0gram

#### MAXIMUM RATIXGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temp. unless otherwise specified Single phase, half sine wave, 60Hz, resistive or inductive load For capacitive load, derate current by 20%

	SYMBOL	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	UNITS
Maximum Repetitive Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current @ T <sub>A</sub> =40°C	V <sub>(AV)</sub>	1.0						Amps	
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	IFSM	50							Amps
Maximum Instantaneous Forward Voltage Drop per Bridge Element at 1.0A	VF	1.1						Volts	
Maximum DC Reverse @T <sub>A</sub> =25°C at rated DC Blocking Voltage @T <sub>A</sub> =125°C	IR	10 500						μΑ	
Rating for fusing (t<8.3ms)	l <sup>2</sup> t	10.4						A <sup>2</sup> S	
Typical Junction capacitance (Note 1)	Cı	25						pF	
Typical Thermal resistance (Note 2)	R⊕JC	74						°C/W	
Operating and Storage Temperature Range	TJ Tstg	-55 to +150							°C

#### NOTES:

- 1. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0 Volts
- 2. Thermal Resestance From Junction to Ambient mounted on P.C.B with  $0.5 \times 0.5^{\prime\prime}$  (13x13mm) copper pads



# DF005S thru DF10S

### SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

#### **RATING AND CHARACTERISTICS CURVES DF005S THRU DF10S**

Fig. 1 - MAXIMUM FORWARD SURGE CURRENT

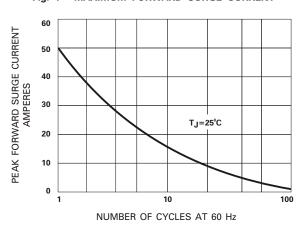


Fig. 2 - DERATING CURVE OUTPUT RECTIFIED CURRENT

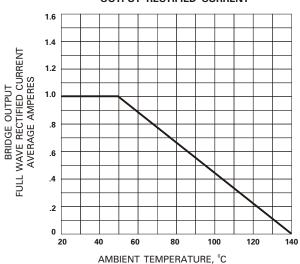


Fig. 3 - TYPICAL FORWARD CHARACTERISTICS

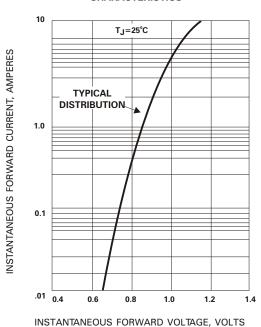


Fig. 4 - TYPICAL REVERSE CHARACTERISTICS

