



DF005S THRU DF10S

GLASS PASSIVATED BRIDGE RECTIFIERS

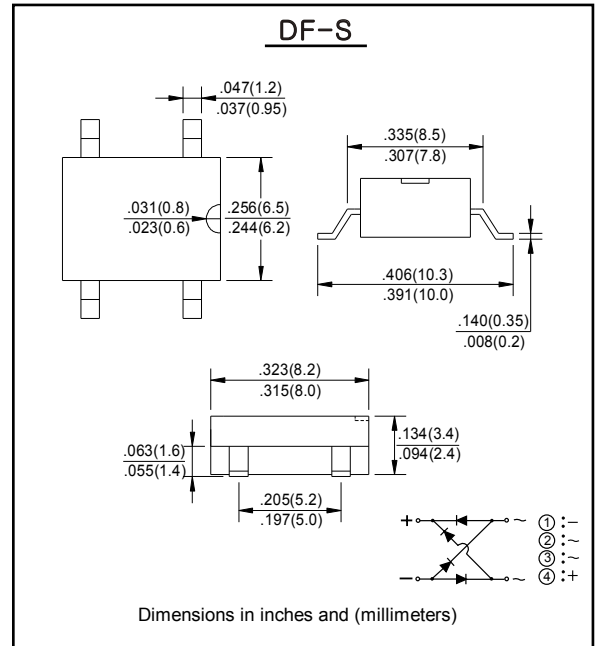
Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

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 AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS		SYMBOL	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	UNITS
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 Output Current at T _A = 40°C		I _O	1.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	50							A
Maximum DC Forward Voltage Drop per Bridge Element at 1.0A DC		V _F	1.1							V
Maximum Reverse Current at rated	@T _A = 25°C	I _R	10.0							μA
DC Blocking Voltage per element	@T _A = 125°C		500							
I ² t Rating for Fusing (t<8.3ms)		I ² t	10							A ² Sec
Typical Junction Capacitance (Note1)		C _J	25							pF
Typical Thermal Resistance (Note 2)		RθJA	40							°C/W
Operating and Storage Temperature Range		T _J ,T _{STG}	-55 to + 150							°C

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13x13mm) copper pads.



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RATINGS AND CHARACTERISTIC CURVES

Fig. 1 - Derating Curve Output Rectified Current

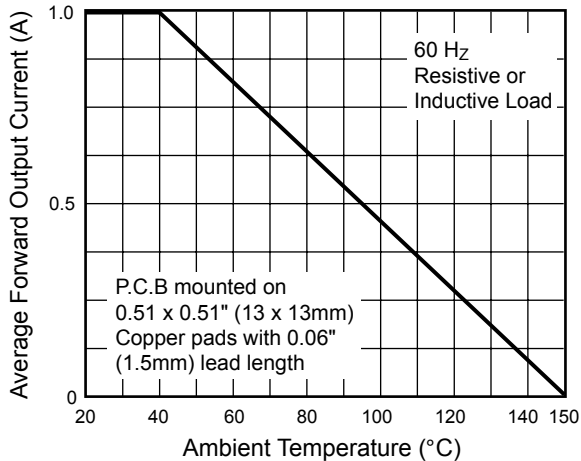


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

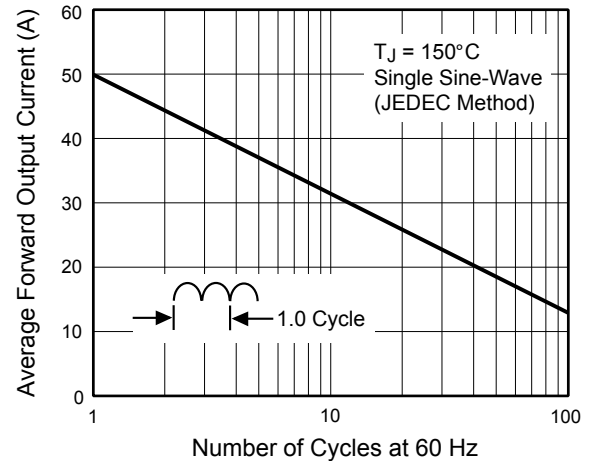


Fig. 3 - Typical Forward Characteristics Per Leg

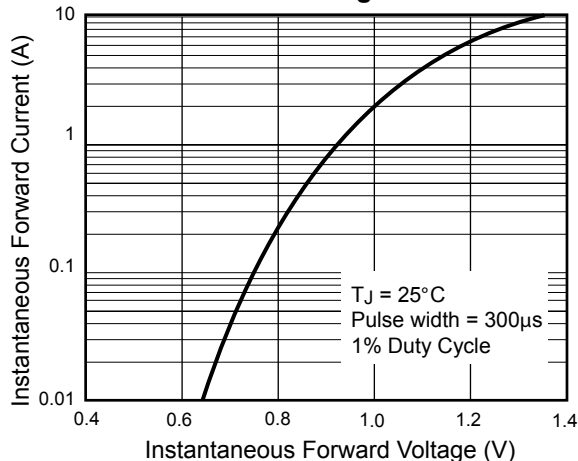


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

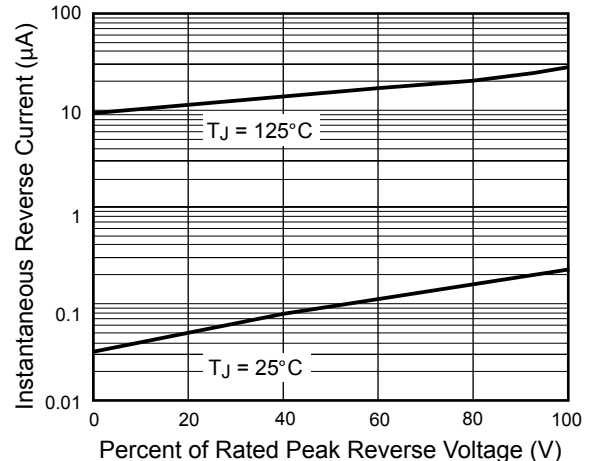


Fig. 5 - Typical Junction Capacitance Per Leg

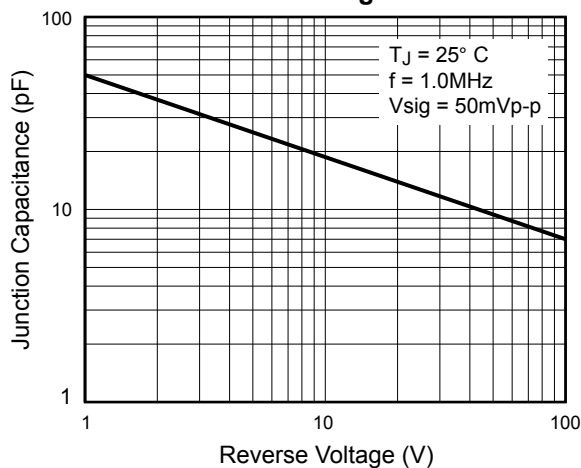


Fig. 6 - Typical Transient Thermal Impedance

