DF005S THRU DF10S

GLASS PASSIVATED BRIDGE RECTIFIERS

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

FEATURES

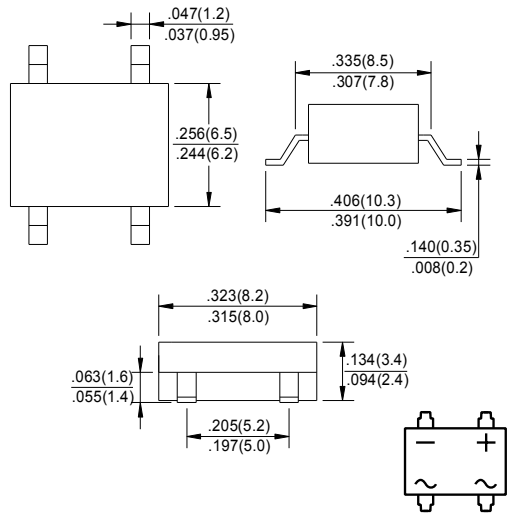
- Plastic package used has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High surge overload rating of 50 Amperes peak
- High temperature soldering guaranteed: 260°C/10 seconds, at 5 lbs. (2.3kg) tension

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

RoHS Compliant

DF-S



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ 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 DC Blocking Voltage per element	@T_A = 25°C	I_R	10.0							μA
	@T_A = 125°C		500							
I^2t Rating for Fusing (t<8.3ms)		I^2t	10							A^2Sec
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

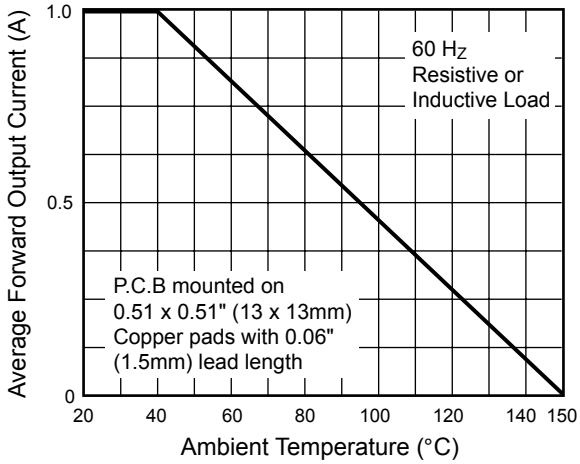

Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

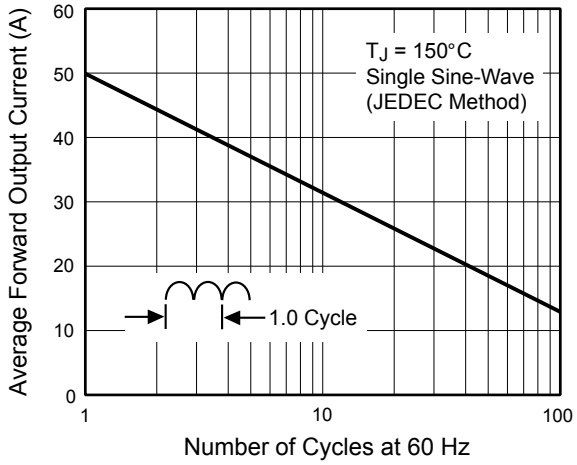

Fig. 3 - Typical Forward Characteristics Per Leg

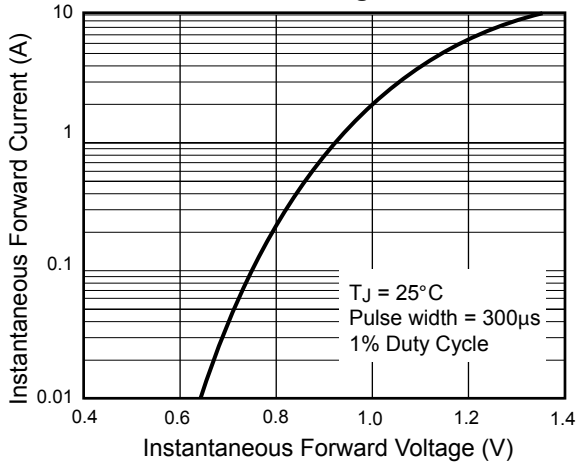

Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

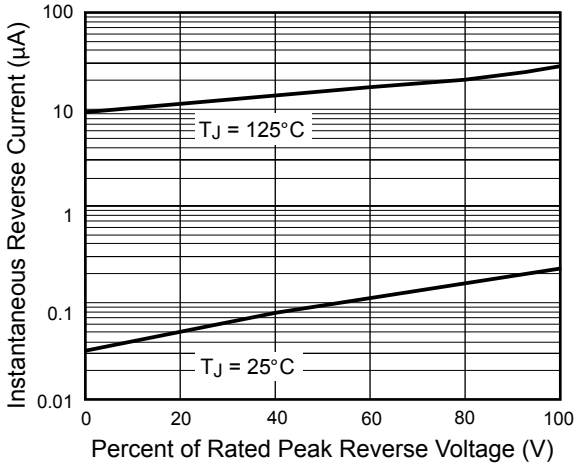

Fig. 5 - Typical Junction Capacitance Per Leg

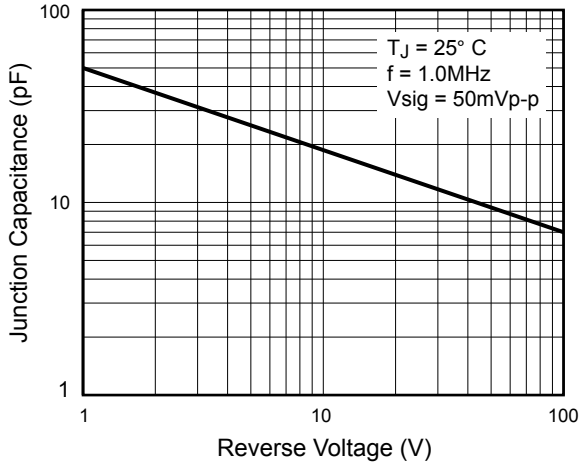

Fig. 6 - Typical Transient Thermal Impedance