



DF15005S THRU DF1510S

GLASS PASSIVATED BRIDGE RECTIFIERS

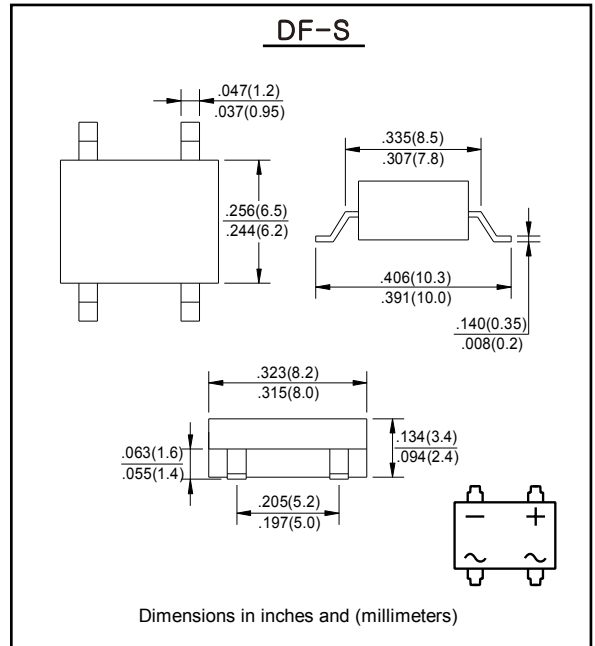
Reverse Voltage - 50 to 1000 Volts Forward Current - 1.5 Ampere

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	DF15005S	DF1501S	DF1502S	DF1504S	DF1506S	DF1508S	DF1510S	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	1.5								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 1.5A DC		V _F	1.1								V
Maximum Reverse Current at rated DC Blocking Voltage per element	@ T _A = 25°C	I _R	10.0						500		μA
	@ T _A = 125°C										
I ² t Rating for Fusing (t<8.3ms)		I ² t	10.4								A ² Sec
Typical Junction Capacitance (Note1)		C _J	25								pF
Typical Thermal Resistance (Note 2)		R _{θJA}	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-FORWARD CURRENT DERATING CURVE

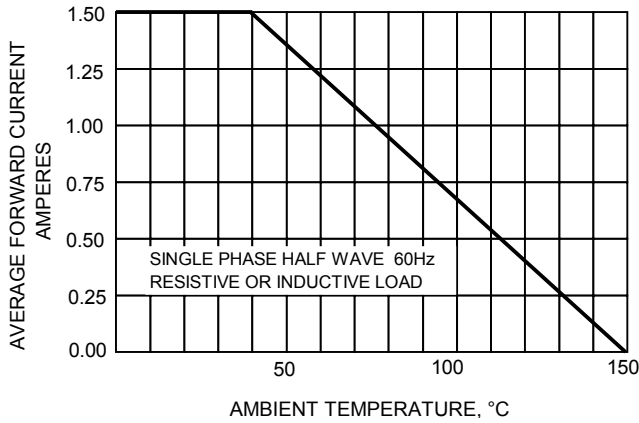


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

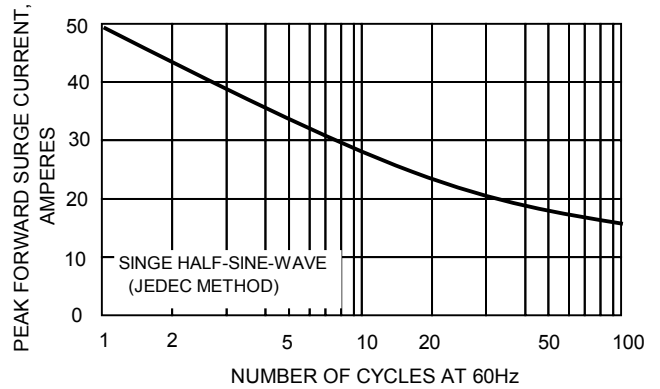


FIG.3-TYPICAL JUNCTION CAPACITANCE

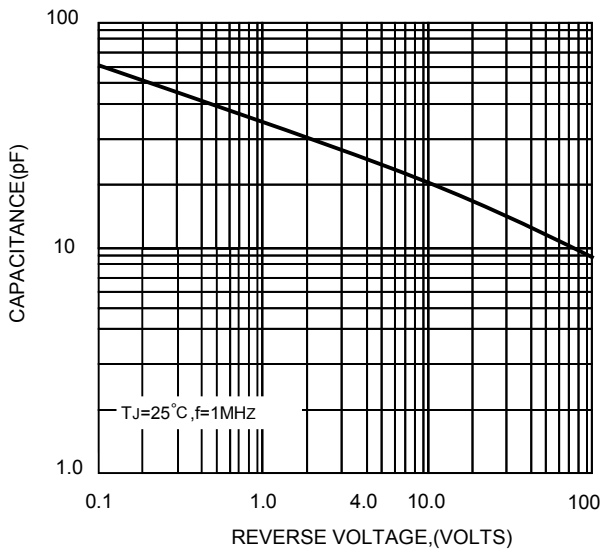


FIG.4-TYPICAL FORWARD CHARACTERISTICS

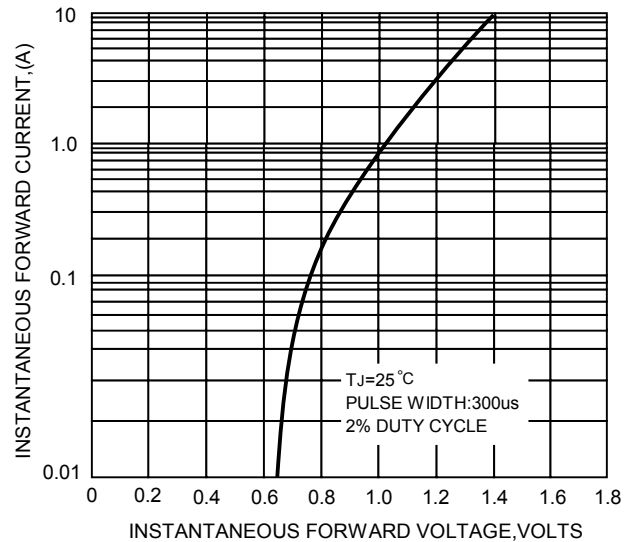


FIG.5-TYPICAL REVERSE CHARACTERISTICS

