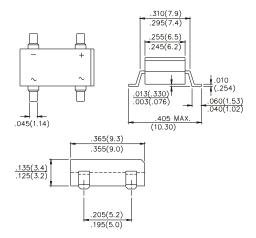
DF15005S thru DF1510S

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS SINGLE-PHASE GLASS BRIDGE

REVERSE VOLTAGE - 50 TO 1000 VOLTS FORWARD CURRENT - 1.5 AMPERES





Dimensions in inches and (millimeters)

FEATURES

- · Rating to 1000V PRV
- · Ldeal for printed circuit board
- Reliable low cost construction utilizing molded Plastic technique results in inexpensive product
- · Lead in plated copper
- The plastic material has UL flammability Classification 94V-0

MECHANICAL DATA

Polarity: As marked on body Weight: 0.02 ounce, 0.38gram Mounting position: Any

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%

		DF 15005S	DF 1501S	DF 1502S	DF 1504S	DF 1506S	DF 1508S	DF 1510S	UNITS
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current @ T _A =40°C	V _(AV)	1.5						Amps	
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	lfsm	50							Amps
Maximum DC Forward Voltage at ADC	VF	1.1						Volts	
Maximum DC Reverse @T _J =25°C at rated DC Blocking Voltage @T _J =125°C	IR	10 500							μΑ
I ² t Rating for fusing (t<8.3ms)	l ² t	10.4						A ² S	
Typical Junction capacitance per element (Note 1)	Cı	25						рF	
Typical Thermal resistance (Note 2)	R⊕JC	40						°C / W	
Operating Temperature Range	τJ	-55 to +150							°C
Storage Temperature Range	Tstg	-55 to +150							°C

NOTES:

- 1. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0 Volts DC $\,$
- 2. Thermal Resestance 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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RATING AND CHARACTERISTICS CURVES DF15005S THRU DF1510S

Fig. 1 - FORWAED CURRENT DERATING CURVE

1.50

1.25

1.25

1.25

1.25

0.50

SINGLE PHASE HALF WAVE 60Hz
RESISTIVE OR INDUCTIVE LOAD

0.00

AMBIENT TEMPERATURE, C

Fig. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

THE SURGE CURRENT

THE

Fig. 3 - TYPICAL JUNCTION CAPACITANCE

100

100

T_J=25°C, f=1MHz

1.0

0.1

1.0

REVERSE VOLTAGE, VOLTS

