

## Model 3602 DC-DC Converter - Specification

I Mechanical Specifications - The outside dimensions are those shown in figure 1.

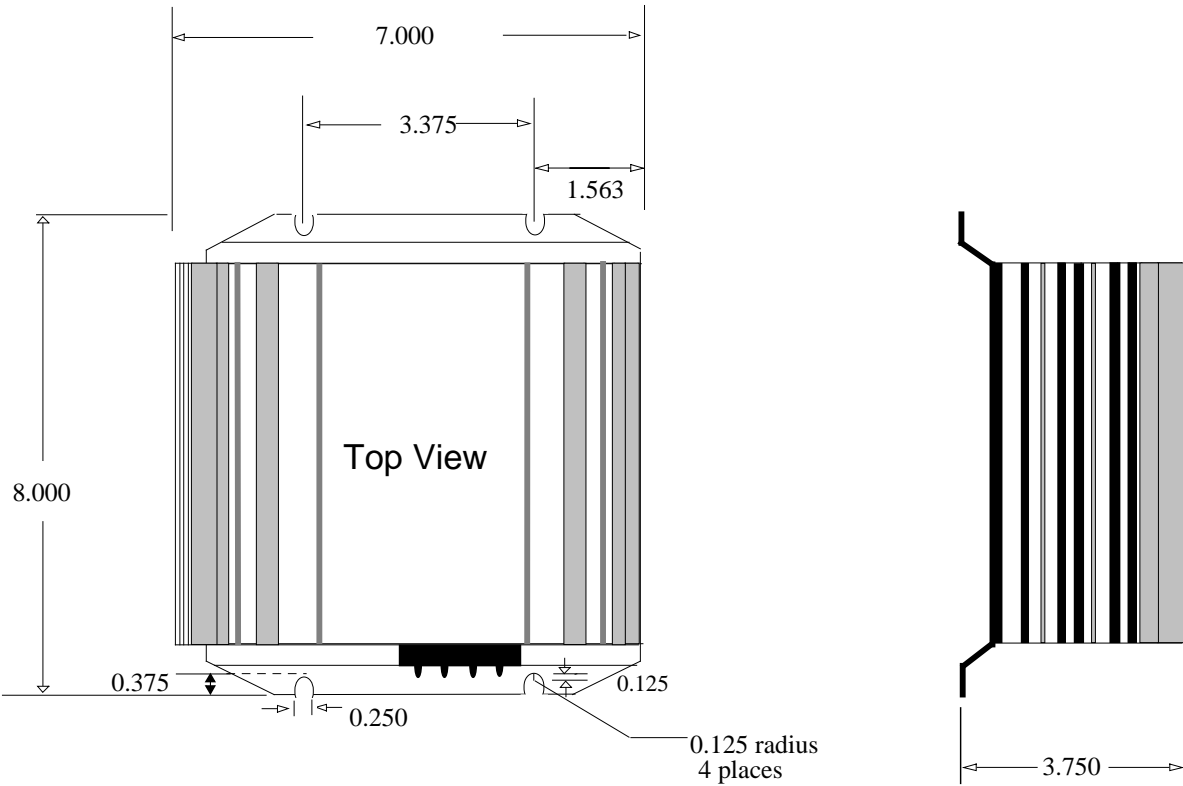


Figure 1 - Dimensions (not to scale)

**Internal Protection** - The printed circuit board is coated with epoxy to provide resistance to the effects of shock, vibration, water and salt spray.

**Approximate Weight** - 5 lbs.

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## II Electrical Connections

- 2.1 Location - Input and output connections are located on a barrier block and are configured as shown in Figure 2.

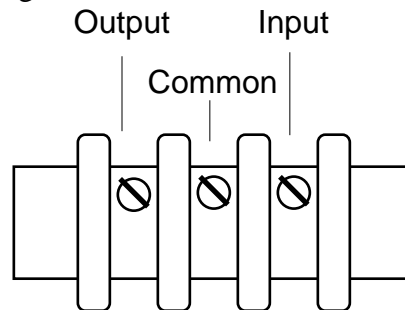


Figure 2 - Input and output connections

## III Input Conditions

- 3.1 Normal input voltage operating range -- 22.0 volts to 36.0 volts  
3.2 High input voltage shutdown --- shut down at input voltage in the range between 36 VDC and 40 VDC.  
3.3 Low voltage shutdown -- shut down at input voltage in the range between 18 VDC and 20 VDC.

## IV - Output Conditions

- 4.1 Output RMS voltage - Factory set between 13.6 VDC and 13.8 VDC.  
4.2 Output Regulation - <0.1 V for all load values  
4.3 Output Ripple and Noise - < 50 mV RMS  
4.4 Output Current - 0 to 30 ADC continuous duty over the entire operating temperature range

- V RF signal transparency - High pass filters are encased in the converter to allow RF signals that are injected at the input terminals to pass freely to the output terminals in a frequency range ensuring PLC4 compatibility.

## VI. Protection mechanisms -

- 1) High input voltage shutdown @ 36-40 VDC
- 2) Low-input voltage shutdown @ 18-20 VDC
- 3) Electronic short-circuit protection on output - will operate continuously into a short circuit without sustaining damage
- 4) Input fuse protection on DC input side against reverse polarity connection

- VII Cooling - Convection cooled

- VIII Efficiency - minimum of 89 % at full load.

- IX Operating Altitude - 0 to 6,000 meters

- X Humidity - 0 to 95% non condensing

- XI Operating Temperature - minus 35C to plus 65C.