

Model 640 DC-DC Converter - Mechanical Specification

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

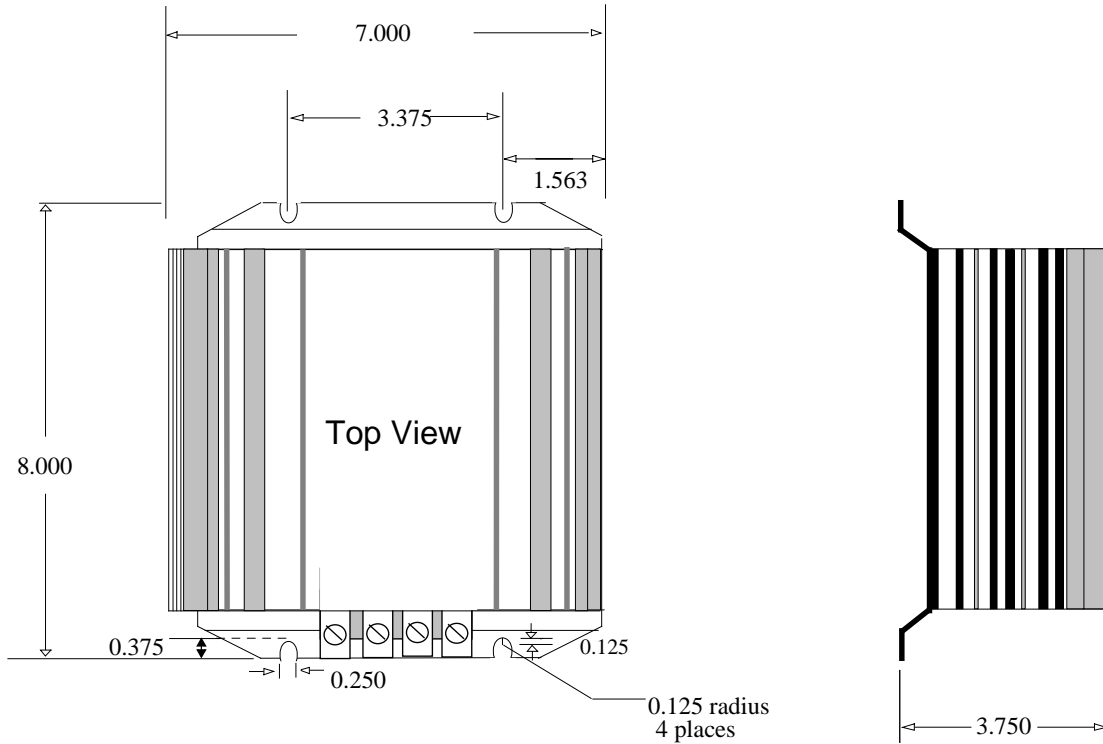


Figure 1 - Dimensions (not to scale)

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.

Model 640 DC-DC Converter - Electrical Specification

II Electrical Connections

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

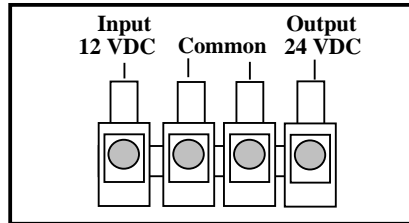


Figure 2 - Input and output connections

III Input Conditions

- 3.1 Normal input voltage operating range -- 11.0 volts to 15.0 volts

IV - Output Conditions

- 4.1 Output RMS voltage - Factory set between 25.5 VDC and 25.7 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 20 ADC continuous duty over the entire operating temperature range

VI. Protection mechanisms -

- 1) High input voltage shutdown @ 15-18 VDC
- 2) Low-input voltage shutdown @ 9.5-10.5 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.