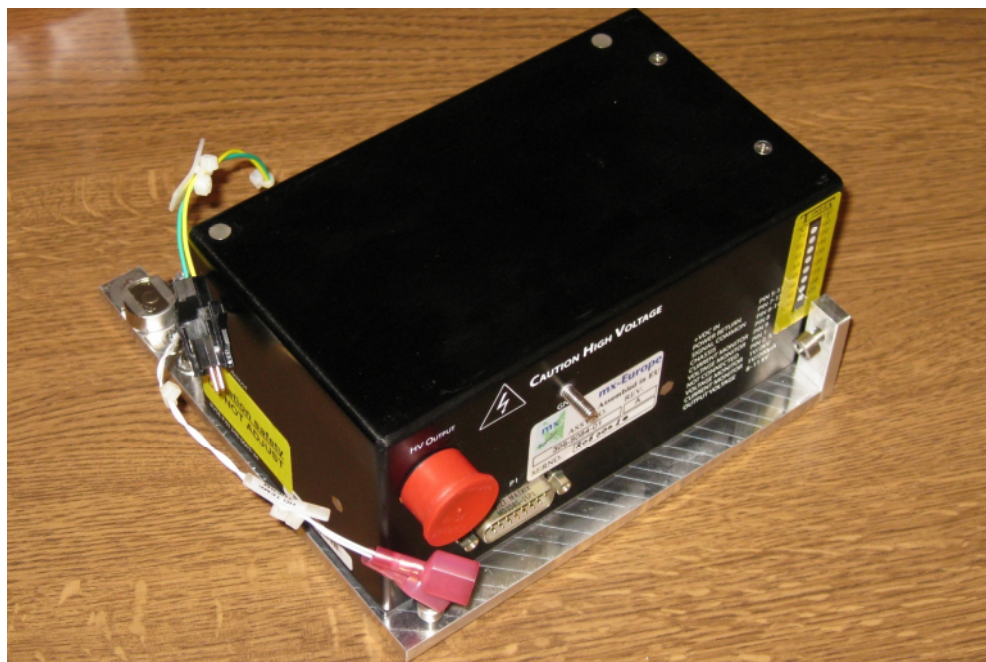


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PRODUCT DESCRIPTION

The 308-50840-03 precision high voltage power supply is specifically designed for focused ion and electron beams. It is used in systems in which low noise, high stability and fast response are main requirements, such as electron and ion beam optics systems for integrated circuit fabrication and testing. This model provides very high quality output voltage parameters without sacrificing its reliability, since it can withstand severe short circuits, arcs and any other fast transients.

Over voltage and over current limits provide safe and reliable power supply protection against long-term overloads and load malfunctions. Implementing differential programming input as well as separating control return from case ground and high voltage return makes it possible that no noise from control inputs is reflected on the output side. These design features assure that the output ripple and noise specifications are always met.

PRODUCT FEATURES

Precision Electron and Ion Beam High Voltage Power Supply

- The supply is a DC-DC converter

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- Input voltage shall be from +23 V dc to +28V dc
- Up to 30kV DC output
- Up to 300 μ A of output current
- Output noise : max 15V peak-to-peak
- Stability: 0,1% over 8 hours / 2% over 1 year
- Separate case ground, control common and high voltage return
- Very good load and line regulation (0.001%)
- Outstanding slew rate (over 35 V/ms) without voltage oscillations
- Compact enclosure (2"x 3,75"x 7")
- Convenient DB 9 connectors for low voltage signal
- High voltage connector
- Arc and short protected, and over-current limited

PRODUCT CONNECTIONS

Input and output low voltage power and monitors via a 15-pin D-shell male connector.

Pin Assignments Connector P1:

<u>FUNCTION</u>	<u>PIN</u>
+VDC IN	5-13
POWER RETURN	7-15
SIGNAL COMMON	6-14
CHASSIS	8
CURRENT MONITOR	9
VOLTAGE MONITOR	1
NOT CONNECTED	2-3-4-10-11-12

MECHANICAL SPECIFICATIONS

Dimensions:

The mechanical dimensions shall be shown on Figure 1.

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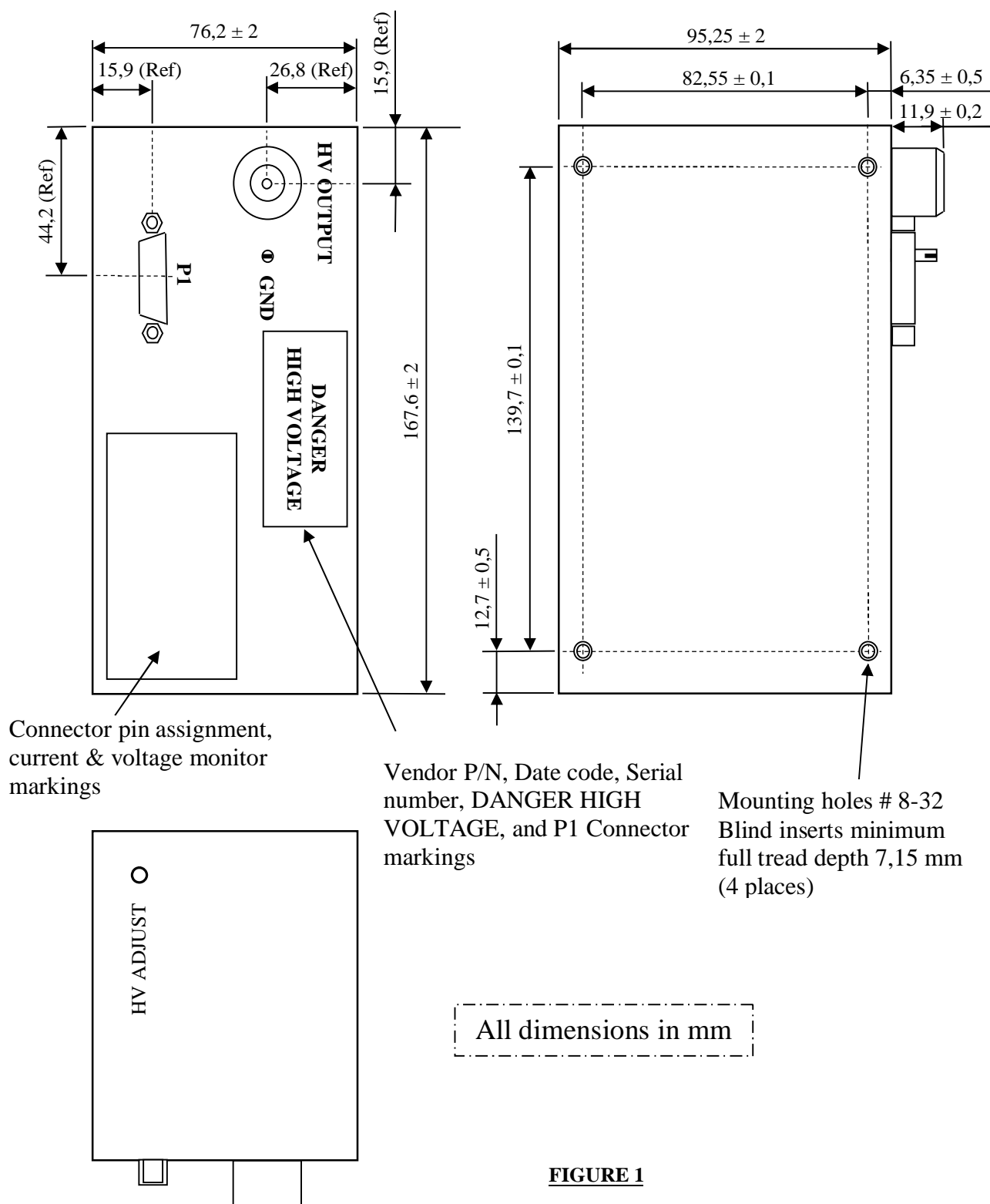


FIGURE 1

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