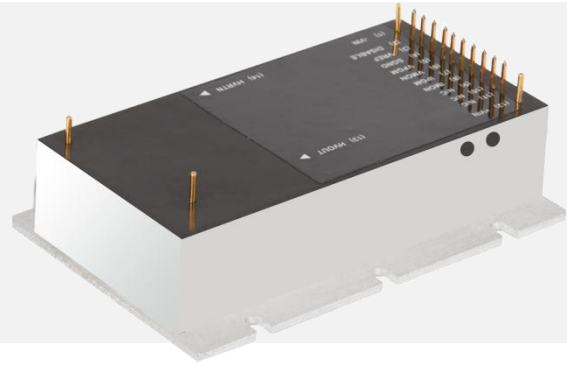


THRL6989 Series

DC-HVDC CONVERTER

6kV, 30W, Compact model



The THRL6989 series, is a miniature 30W regulated high voltage DC-DC converter product line providing voltages up to 6kV. THRL6989 offers both voltage and current mode controls and monitors making the high voltage integration easier.

This product deploys a proprietary design which delivers accurate and reliable high voltage at higher efficiency with low EMI. Small size, digital compatible voltage and current monitors and controls, and superior thermal management makes it an ideal product for a wide range of high voltage applications.

- +24VDC input (22 to 30V)
- Output voltage and current regulated
- 0 to 100% programmable output voltage and current
- Voltage & current monitor outputs
- Operating temperature: -40°C to +70°C
- Short circuit, arc, and overload protections
- On-board +5V reference
- Efficiency >80%
- Output ripple as low as 0.01%
- Premier thermal performance
- 1 year warranty

Typical Applications:

- Mass Spectrometry
- Electrophoresis
- E-beam/Ion Beam
- Electrostatic Chuck
- Capacitor Charging
- High Voltage Bias
- Photo Multiplier Tube
- Scanning Electron Microscopy

Specifications:

Input: +24VDC

Output : Rated Voltage: 6kV, Rated Current: 150mA, programmable output from 0 to 100% of rated voltage.

Voltage Regulation:

Load: 0.01% (no load to full load).

Line: $\pm 0.01\%$ ($\pm 10\%$ of input voltage change).

Current Regulation:

Load: 0.01% (no load to full load).

Line: $\pm 0.01\%$ ($\pm 10\%$ of input voltage change).

Ripple : Better than 1%rms (0.1%rms Optional), under rated output condition.

Environmental:

Operational: -40°C to +70°C.

Storage: -55°C to +105°C.

Temperature Coefficient: Voltage and current better than 100 ppm/°C.

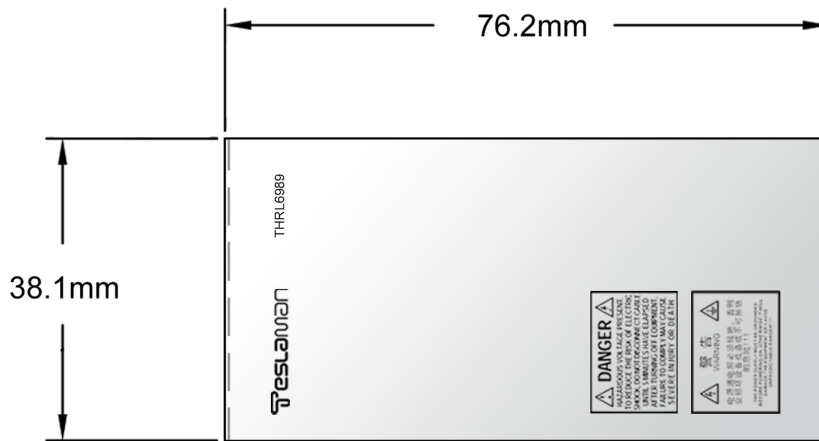
Cooling: Natural convection

Stability: Less than 0.1% every 8 hours after half hour warm-up.

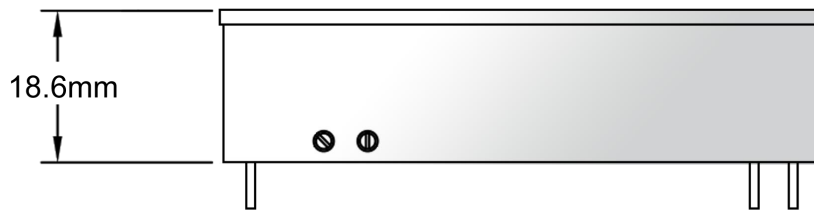
Dimensions: W38.1mm, H18.6mm, D76.2mm.

Weight: 120g.

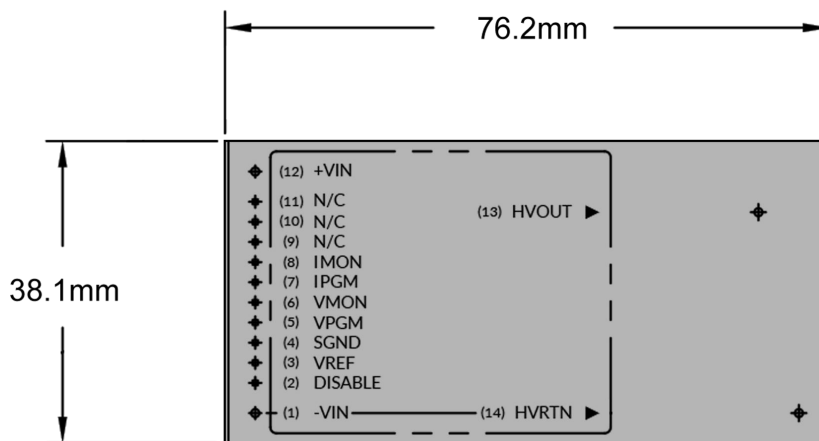
Dimensions: mm



Top View



Side View



Bottom View