osi1611 Series

6 kV, 5 W, less than 1U high



Product introduction

The osi1611 series is a miniature 5 W regulated high-voltage DC-DC converter with output ratings up to 6 kV. It provides good regulation, fully adjustable output voltage and built-in short-circuit and overload protection. A 0 to +5 VDC input controls output from 0–100%. Voltage/current monitor outputs and a +5 VDC reference are included in the standard package for easy HV integration. Digitally compatible control inputs and monitor outputs suit a range of high-voltage applications.

Product features

- +24 VDC input (22–30 V)
- Output voltage up to 6 kV
- 0–100% programmable output voltage
- Voltage and current monitor outputs
- Onboard +5 V reference
- Load and line regulation <0.01%
- Low ripple <0.01%
- Short-circuit, arc and overload protection
- Operating temperature −40°C to +70°C
- 3-year warranty

Specifications

Parameter	Specification
Input	+24 VDC.
Output	Rated voltage 6 kV; rated current 14.3 mA; 0–100% programmable output voltage.
Voltage regulation	Load: 0.01%, no load to rated load. Line: ±0.01% for ±10% input change.
Current regulation	Load: 0.01%, no load to rated load. Line: ±0.01% for ±10% input change.
Ripple	Better than 1% RMS at rated output; 0.1% RMS optional.
Ambient temperature	Operating: −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% per 8 hours after a 0.5-hour warm-up.
Dimensions	33.0 mm wide, 15.2 mm high, 64.8 mm deep.
Weight	0.74 kg.

Typical applications

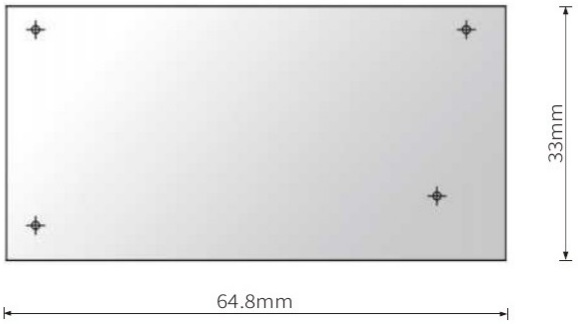
Mass spectrometry; electrophoresis; electrostatic chucks; high-voltage bias; capacitor charging; detectors; scanning electron microscopy.

Outline dimensions

Dimensions in mm.


osi1611
OSIMAI
DANGER
33mm
64.8mm


15.2mm


33mm
64.8mm