osi1602 Series

2 kV, 1 W, less than 1U high



Product introduction

The osi1602 series is a high-performance precision-regulated high-voltage converter with high stability and low ripple, a built-in voltage-monitor output and an onboard precision reference. Each model is programmable from 0–100% rated output through a DAC-compatible high-impedance programming input. The reference can drive 100% high-voltage output or regulate output through an external potentiometer or divider. The internally buffered voltage monitor provides a low-impedance signal of up to 1 mA to external circuitry. A quasi-sinusoidal oscillator, internal transformer shielding and an isolated steel enclosure reduce radiated EMI/RFI to very low levels. Proprietary encapsulation, custom 94V-0 construction and a high-performance formulation provide excellent high-voltage and thermal performance. A separately supplied CM-series mounting kit converts any osi1602 unit into a chassis-mount solution with an HV connector.

Product features

- Output voltage 100–2000 V
- Operating temperature −10°C to +50°C
- Temperature coefficient <25 ppm/°C
- Shielded enclosure with isolated case ground
- Ultra-low ripple down to 5 ppm
- 5 V and 12 V input models
- Precision regulation
- 0–100% programmable output
- Onboard reference voltage source
- 3-year warranty

Specifications

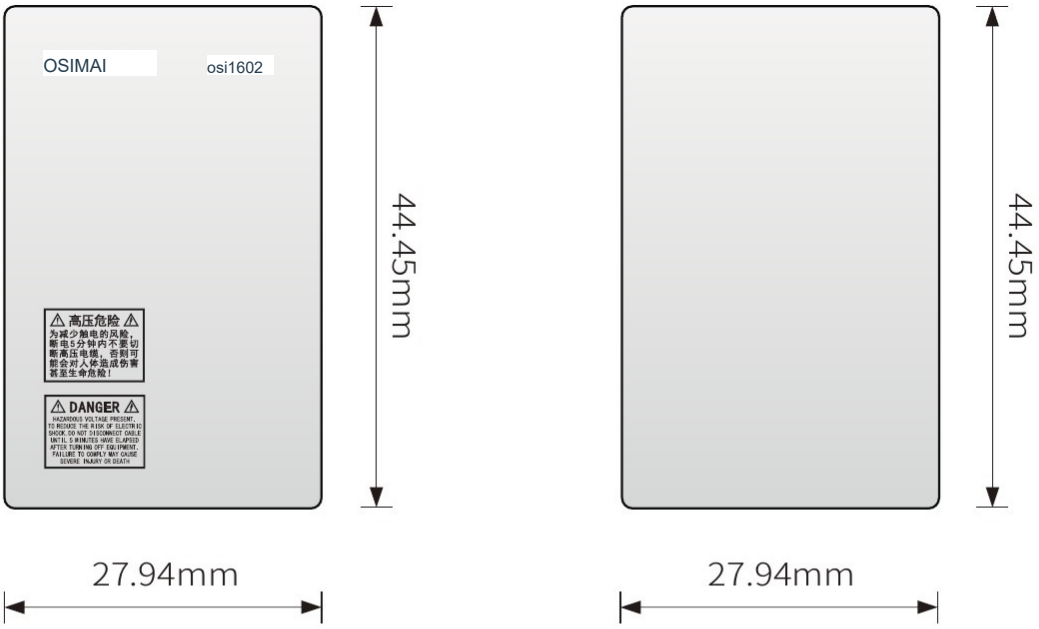
Parameter	Specification
Input	5 V / 12 V.
Output	Rated voltage 2 kV, rated current 10 mA; continuously adjustable from zero to maximum voltage; single positive or negative polarity.
Voltage regulation	Load: 0.01%, no load to rated load. Line: ±0.01% for ±10% input change.
Current regulation	Load: 0.01%, no load to rated load. Line: ±0.01% for ±10% input change.
Ripple voltage	Better than 1% RMS at rated output; 0.1% RMS optional.
Ambient temperature	Operating: −10°C to +50°C. Storage: −25°C to +90°C.
Temperature coefficient	Voltage and current: better than 25 ppm/°C.
Cooling	Natural convection.
Stability	Less than 0.1% per 8 hours after a 0.5-hour warm-up.
Dimensions	27.94 mm wide, 12.70 mm high, 44.45 mm deep.
Weight	39.6 g.

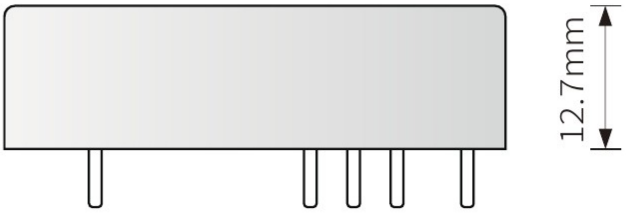
Typical applications

Photomultiplier tubes; solid-state detectors; avalanche photodiodes; piezoelectric devices; capacitor charging; electro-optic lenses.

Outline dimensions

Dimensions in mm.


OSIMAI
osi1602
⚠ 高压危险 ⚠
为减少触电的风险，
断电5分钟内不要切
断高压电缆。否则可
能会对人体造成伤害
甚至生命危险！
⚠ DANGER ⚠
HAZARDOUS VOLTAGE PRESENT.
TO REDUCE THE RISK OF ELECTRIC
SHOCK, DO NOT DISCONNECT CABLE
UNTIL 5 MINUTES HAVE ELAPSED
AFTER TURNING OFF EQUIPMENT.
FAILURE TO COMPLY MAY CAUSE
SEVERE INJURY OR DEATH
44.45mm
27.94mm
44.45mm
27.94mm


12.7mm