TCA6959 Series

DC-HVDC Converter

2kV,1W,Less than 1U Height

The TCA6959 Series is a high performance, precision regulated, high voltage converter with high stability and low ripple, along with a built-in voltage monitor output and an on-board precision voltage reference. Each model is programmed from 0 to 100% of rated output via a DAC compatible high impedance programming input. The voltage reference can be used to drive the high voltage output at 100% or to adjust the output with an external potentiometer or voltage divider. The output voltage monitor is internally buffered to provide a low impedance (up to 1mA) signal to external circuitry. A quasi-sinewave oscillator, internal transformer shielding, and an isolated steel case reduce EMI/RFI radiation to extremely low levels
A proprietary encapsulation process and custom 94 V-0 listed, high performance formula are used to achieve excellent high voltage and thermal properties. CM Series Mounting Kits are available separately and can be used to convert any CA Series unit into a chassis mount solution with high voltage connectors.

- 5V and 12V Input Models
- Precision Voltage Regulated
- Output Voltages from 100V to 2000V
- 0 to 100% Programmable Output
- On-board Voltage Reference
- Operating Temperature -10°C to +50°C
- <25ppm/°C Temperature Coefficient
- Shielded Case with Isolated Case Ground
- Ultra Low Ripple, down to 5ppm
- 1 Year Warranty

Typical Applications：

- Photo Multiplier Tube
- Solid State Detectors
- Avalanche Photodiodes
- Electrophoresis
- Piezo Devices
- Capacitor Charging
- EO Lenses

Specifications：

Input： 5V/12V.

Output：

Rated output Voltage up to 2kV,rated output current 10mA,voltage adjustable from 0 to highest value, uni-polarity output.

Voltage Regulation：

Load：0.01%(no load to full load).

Line：±0.01%(±10% of input voltage change).

Current Regulation：

Load：0.01%(no load to full load).

Line：±0.01%(±10% of input voltage change).

Ripple：

Less than 1%rms(0.1%rms optional), under rated output condition.

Environmental：

Operational：-10℃ to +50℃.

Storage：-25℃ to +90℃.

Temperature coefficient： Voltage and current better than 25 ppm/℃.

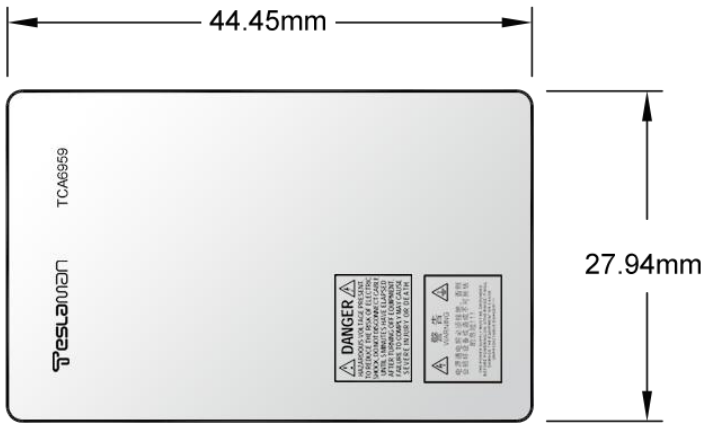
Cooling： Natural Convection.

Stability： 50ppm/hr.

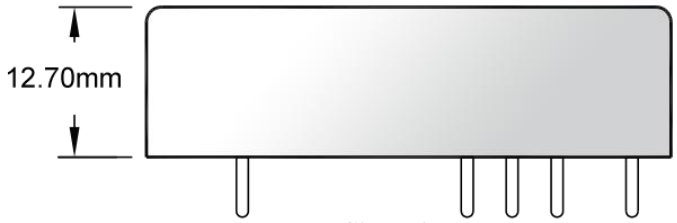
Dimensions： W27.94mm,H12.70mm,D44.45mm.

Weight： 39.6g.

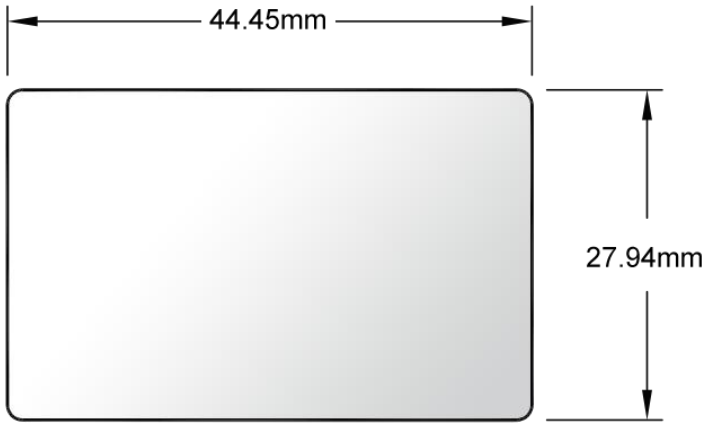
Dimensions：mm



Top View



Side View



Bottom View