

TMS6053 Series

Modular High Voltage Power Supply



3kV, 3W Arc and Continuous Short Circuit Protection, Low Storage Energy

Teslaman TMS6053 module is designed for PCB mounting with high reliability, small size and light weight. This TMS6053 module provides good regulation, low ripple, high stability output voltage range from 300V to 3kV in a versatile, compact and cost-effective high voltage design. This module includes remote control and arc and short circuit protection. Each module is encapsulated by aluminum shell, which eliminates the interference between power supply and outside.

- Output Voltage Up to 3kV
- 3W Rated Power
- Positive or Negative Polarity
- Arc and Continuous Short Circuit Protection
- Low Storage Energy
- High Reliability
- Internal 5V Reference

Typical Application:

Photomultiplier tube; Precise lens; Image intensifier; Instruments for atomic energy; Spectroscopy.

Specifications:

Input Voltage: + 12VDC \pm 1V. Other input voltages are optional.

Input Current: at full load output, < 0.65 a.

Output Voltage: Continuously adjustable in full range, positive or negative polarity models can be selected. See table for power supply range.

Output Voltage Control: remote voltage programming 0 to 5VDC, providing 0 to full output.

Output Power: 3W.

Voltage Regulation:

Input: When the input voltage changes to 1V, 0.005%. (< 0.01% for TMS6053-0.3 power supply).

Load: 0.05% at maximum voltage from 100 μ A to full load. (< 0.01% for TMS6053-0.3 power supply).

5VDC Reference: +5.0 V (\pm 0.2 V), maximum output 1mA.

Temperature:

Working temperature: 0 $^{\circ}$ C to + 50 $^{\circ}$ C.

Storage temperature: -35 $^{\circ}$ C to + 85 $^{\circ}$ C.

Temperature Coefficient: 50ppm/ $^{\circ}$ C.

Stability: After starting up for one hour, it is < 0.05% every 8 hours under constant working conditions.

Humidity: 0-90%, non-condensing.

Dimensions:

Power supply \leq 1 kV: 53mm wide, 23mm high and 78mm deep.

Power supply > 1kV: width 60mm, height 28mm and depth 104mm.

Weight:

Output \leq 1kV: 80g.

Output > 1kV: 160g.

TMS6053 Series High Voltage Power Supply Model Selection Table (Customizable):

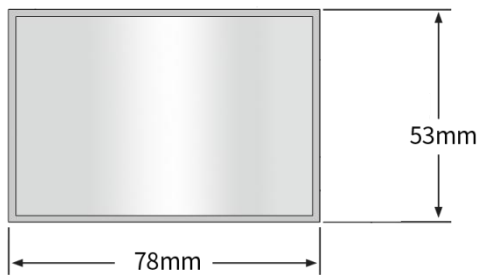
Output Rating		Type of Power Supply	
kV	mA	Positive Polarity	Negative Polarity
1	3	TMS6053P1-3	TMS6053N1-3
2	1.5	TMS6053P2-3	TMS6053N2-3
3	1	TMS6053P3-3	TMS6053N3-3

Overall Dimensions: mm

power supply $\leq 1\text{kV}$:

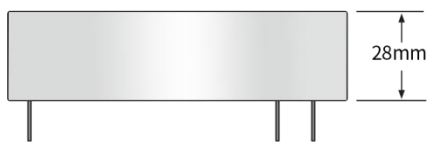


side view

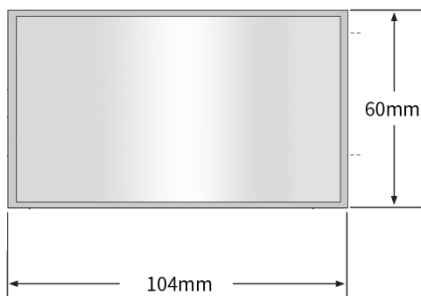


bottom view

power supply $> 1\text{kV}$:



side view



bottom view