

TMS6053 Series

Modular High Voltage Power Supply | 3kV, 3W PCB Mounted HV Power Supply



- Analog Voltage Programming
- Voltage monitoring
- 3W Rated Power
- Positive/Negative Polarity or Floating
- Arc and Continuous Short Circuit Protection
- Low Storage Energy
- Compact design

Product Introduction:

Teslaman TMS6053 module is designed for PCB mounting with output range from 300V to 3kV, output power up to 3W, high reliability, small size and light weight. This TMS6053 module provides good regulation, low ripple, high stability. 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.

Typical Applications:

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

Specification Description:

Input Voltage	+ 12VDC $\pm$ 1V. Other input voltages are optional.
Input Current	Maximum 0.35A
Output Voltage	300 to 3kV.
Output Polarity	Maximum 3W
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). Load: 0.05% at maximum voltage from 100 μ A to full load. (< 0.01% for TMS6053-0. 3).
Ripple	Better than 100ppm(p-p) under rated output.
Stability	After starting up for one hour, it is < 0.05% every 8 hours under constant working conditions.
Protection	Over-Voltage;Over-Current; Arc and Short-circuit;
Temperature Coefficient	50ppm/ $^{\circ}$ C.
Temperature	Working temperature: 0 $^{\circ}$ C to + 50 $^{\circ}$ C. Storage temperature:-35 $^{\circ}$ C to + 85 $^{\circ}$ C.
Humidity	0-90%, non-condensing.
Cooling	Convection
Dimensions	Power supply > 1kV: width 60mm, height 28mm and depth 106m.
Weight	Output > 1kV: 160g.
Grounding	Copper pin to ground
Output	Copper pin.

Description of Model Code

The model code represents the performance and parameters of the power supply, which are:

Maximum output voltage in kV;

Maximum output power in W;

Output polarity, P for positive output, N for negative output, F for floating output;

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Model Polarity Maximum Voltage Maximum Power

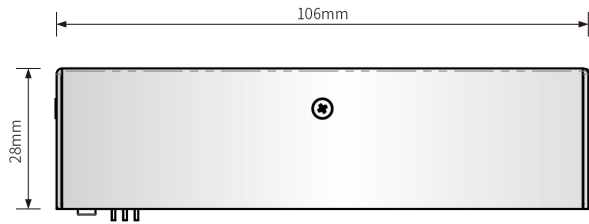
TMO7036 Model Selection Table

Output Rating		Type of Power Supply		
kV	mA	Positive Polarity	Negative Polarity	Floating
1	3	TMS6053P1-3	TMS6053N1-3	TMS6053F1-3
2	1.5	TMS6053P2-3	TMS6053N2-3	TMS6053F2-3
2.5	1.2	TMS6053P2.5-3	TMS6053N2.5-3	TMS6053F2.5-3
3	1	TMS6053P3-3	TMS6053N3-3	TMS6053F3-3

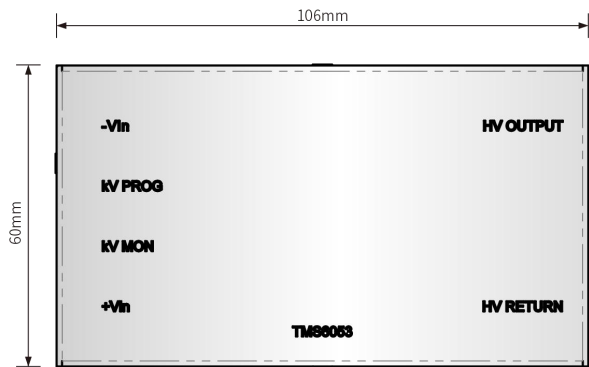
TMS6053 PIN Descriptions:

PIN	Signal	Signal Parameters
1	24V	+24Vdc, 0.35A (Max.)
2	Voltage Mon.	0 to 10V=0 to 100% of rated output
3	Voltage Prog.	0 to 10V=0 to 100% of rated output
4	GND	GND(analog signal ground)
5	HV Ground	Common Ground for P/N; Separate for floating output
6	HV Output	0 to rated output

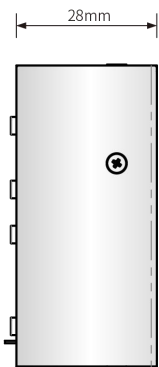
Dimensions: mm



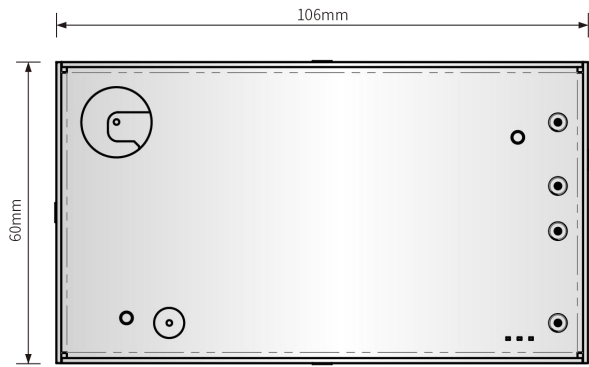
Front View



Top View



side view



Rear View