

Chapter 1 Introduction

TM6352 Series

Precision high voltage amplifier | High stability, Low ripple, Fast dynamic response



- Bipolar models available at 0 to 10 kV, 15 kV, 20 kV
- Unipolar models available at 0 to 15 kV and 20 kV
- Operates in DC, reversible, and amplifier modes
- Fast slew rate and high bandwidth at an excellent value
- Can both source and sink current
- PPM level line & load regulation
- 50 ppm temperature coefficient (25 ppm optional)
- Reduced ripple option available
- Differential precision 0 to 10 VDC control input
- Precision voltage and current monitors

Product Information :

TeslaMan TM6352 series of DC-to-DC high voltage power supplies operates a precision filter / divider and linear HV switch to produce a high voltage amplifier (HVA). These modules provide a high-resolution, high voltage DC to full scale waveform capability greater than 500 Hz output. 10 / 15 / 20 kV HVA modules are optimized for bias applications while providing excellent line regulation, load regulation, dynamic response, and stability. The HVA series can both source and sink current operating linearly through 0 V with low ripple and noise over the entire output range.

Typical Applications :

Derviers; Electrohydrodynamics; Electrostatic chuck ; Pockels cells; Laser and electro-optic modulation; Electrophoresis; Amp; Ion beam and electron beam devices such as mass spectrometry, and electron microscopes as well as electrostatic deflection/focusing, flocking, coating, electrospinning, precipitation and electrocoalescence

Specifications :

Input	24VDC±10%, 750mA。
Output	10kV, 0.1mA, 1W。
Voltage setting range	0~ rated output
Voltage operating range	0~100% of rated output
Ripple	0.05%p-p
Constant voltage output	yes
Constant current output	yes
Line regulation	<0.01%
Load regulation	<0.01%
Waveform frequency	500Hz
Stability	<0.1% after half hour warm-up
Temperature coefficient	Voltage and current < 50ppm/°C。 (25ppm/°C optional)
Environmental	Operational: 0 to 45°C, Storage: -20°C to 80°C。
Humidity	10 to 90% RH, non-condensing.
Protection	Arc protection、 Over-voltage、 Over-current and short-circuit protection.
Protection response	Restart
Interface	Analog DB15
Dimensions	W165.1mm H38.1mm D247.7mm
Weight	About 2.54kg

TM6352 Series model selection table:

Rated value		Model
kV	mA	
10	0.1	TM6352B10-1
15	0.1	TM6352B15-1.5
20	0.1	TM6352B20-2

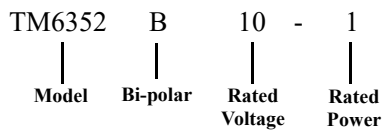
Description of Model Code

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



Dimensions: mm

