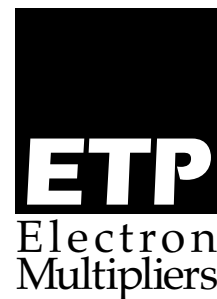


Active Film Multiplier™ FOR THE Agilent Technologies (HP) 598x series Mass Spectrometer (Positive ions Only)



PRODUCT DATA

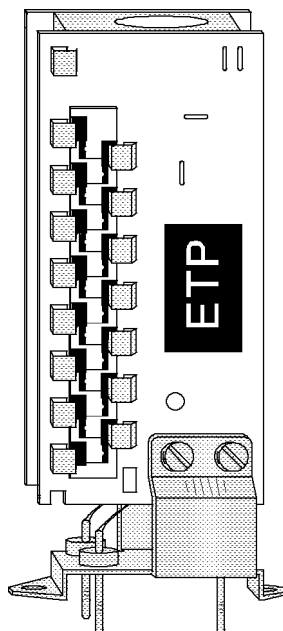
The ACTIVE FILM Multiplier™ model 14512 is specifically designed for application in Agilent Technologies (HP) 598x series mass spectrometers. The 14512 is a direct replacement electron multiplier for HP598x series mass spectrometer using positive ions only. The 14512 is fully compatible with Agilent Technologies hardware and "Auto-tune" software.

ACTIVE FILM Multipliers™ are a new development in multiplier technology that incorporates totally air-stable "ACTIVE FILM" materials into a discrete-dynode multiplier design to produce an exceptionally sensitive ion detector with long operating life and excellent air stability. ACTIVE FILM Multipliers give a combination of performance and durability unsurpassed by any other type of electron multiplier detector.

ACTIVE FILM Multipliers™ have higher gain than alternative multipliers resulting in consistently lower "Auto-tune" voltages. Their long operating lifetime means less frequent multiplier replacement and reduced instrument down-time.

ACTIVE FILM Multiplier Part No. 14512

Arrives ready to install in your
Agilent Technologies (HP) 598x mass
spectrometer



INSTRUMENT:

Agilent Technologies (HP)
598x series
for Positive ions only

APPLICATION:

GC-MS

MULTIPLIER PART NO.:

14512

- "Plug-in" Compatible
- High Sensitivity
- Low Noise
- High Gain
- Long Life
- Stable in air
- Bakeable to 350°C

ACTIVE FILM Multipliers are a completely new type of electron multiplier detector for mass spectrometry and represent the latest development in electron multiplier technology.

ACTIVE FILM Multipliers combine the wide dynamic range and longevity of discrete-dynode multipliers with the compact size and air stability of continuous-dynode multipliers.

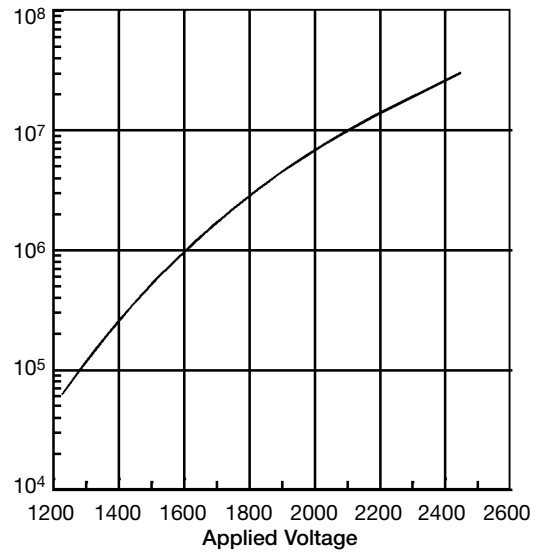
ACTIVE FILM Multipliers use a new totally air-stable dynode material in a unique and highly efficient discrete-dynode structure to produce an ion detector with performance and long operating lifetime unsurpassed by pre-existing electron multiplier detectors.

APPLICATION NOTES

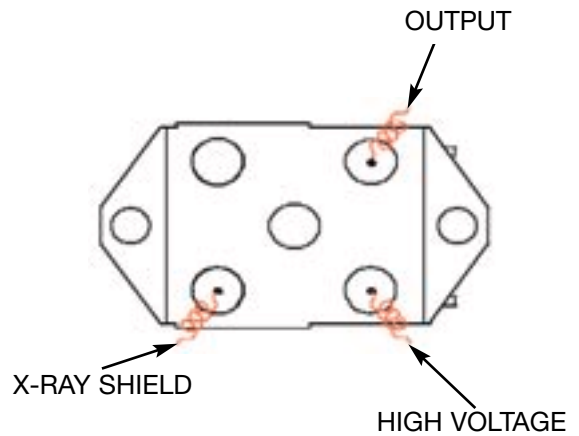
The multiplier mounting bracket and over-all mechanical dimensions of the 14512 ACTIVE FILM Multiplier are designed for easy installation into the Agilent Technologies (HP) 598x series mass spectrometer. The 14512 is for HP598x systems which use positive ions only

There are three electrical connections to be made to properly install the 14512. Electrical connections are made via the three leads extending from the base of the multiplier.

The positions of the three connection leads, 1) high voltage, 2) the X-ray shield and 3) the signal output, are shown in the diagram opposite. (Ground is connected via the mounting bracket)



Typical gain curve of the 14512



Bottom view of 14512 showing connection pin positions

SPECIFICATIONS

Replacement multiplier for Agilent Technologies (HP) Mass Spectrometer model number:

Typical voltage to achieve 1×10^5 gain

Maximum Dark Current at 2.5kV

Maximum bake-out temperature in vacuum

Number of dynodes

Total internal resistance (HV lead to ground)

14512

HP 598x series
(Positive Ions Only)

1.3 kV

<1 picoamp

350°C

12

16.5 MΩ



Electron
Multipliers

www.etpsci.com

A DIVISION OF SGE GROUP OF COMPANIES

SGE International Pty. Ltd.
Tel: +61 (0) 9837 4200
Fax: +61 (0) 9874 5672
Email: techsupport@etpsci.com

SGE, Incorporated (USA)
Toll Free: (800) 945 6154
Fax: (512) 836 9159
Email: usa@sge.com

SGE Europe Ltd
Tel: +44 (0) 1908 568844
Fax: +44 (0) 1908 566790
Email: uk@sge.com



www.sge.com