

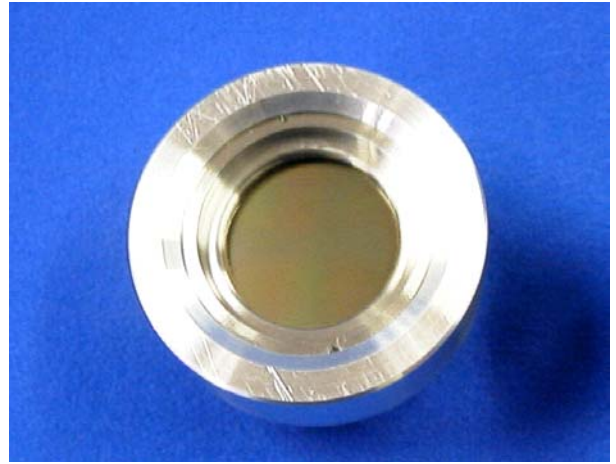
25 mm TIME-OF-FLIGHT DETECTOR

- High Performance, Fast Timing Detectors for TOF Mass Spec
- Improved Mass Resolution
- 650 Pico-second Pulse Width
- 300 Pico-second Rise Time
- 25 mm Collection Diameter
- Low Profile 50 Ω Conical Anode
- Replaceable MCP Cartridge

The BURLE 25 mm **Time-of-Flight Detector** offers twice the collection area of standard TOF detectors as well as incorporating the patented features that provide previously unobtainable levels of mass resolution, dynamic range, and detection sensitivity for Time-of-Flight Mass Spectrometry.

Whether you are currently working with or developing a new MALDI-TOF, ESI-TOF, or custom TOF Mass Spec, the **mass resolution** of your instrument is often determined by the detector. Benefiting from our exclusive small pore microchannel plate technology and a new low profile, 50 ohm impedance matched conical anode, BURLE's Time-of-Flight Detector provides sub-nanosecond pulse widths – nearly ten times faster than conventional detectors. In addition, the large collection area allows more ions to be collected, further increasing instrument sensitivity.

BURLE's small pore MCPs, 5 microns in diameter, offer one of the highest channel densities of any MCP available. This channel density provides **dynamic range improvements** ten times that of conventional microchannel plates.



These MCPs also give the Time-of-Flight detector **superior sensitivity** and **excellent temporal resolution**. The flat input surface provides uniform ion conversion and the higher aspect ratio of the MCPs provides gains in excess of 10^7 .

MCP replacement **is a snap** with BURLE's exclusive **Quick-Fit[®]** cartridge. Each cartridge includes a Chevron[™] set of two Long-Life[™] small pore Extended Dynamic Range MCPs, and a high transmission grid mounted in a rugged module. This module can be purchased separately and allows the operator to replace MCPs quickly and easily.

High mass resolution, dynamic range improvements, and superior sensitivity, all from the world's largest supplier of standard, retrofit and custom detectors for mass spectrometry.

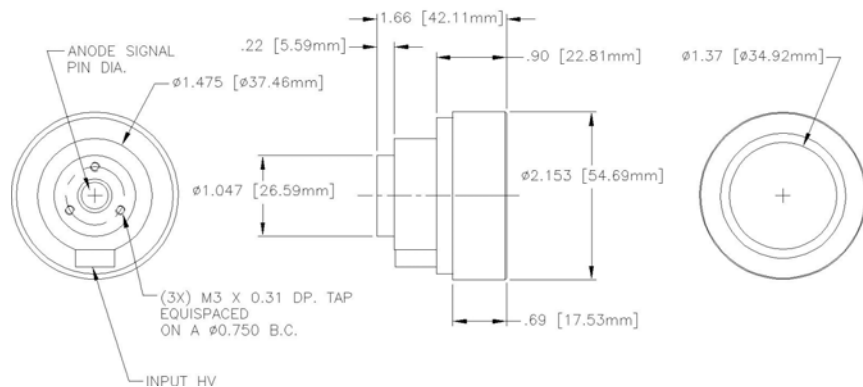


25 mm TIME-OF-FLIGHT DETECTOR

SPECIFICATIONS

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| Application: | Time-of-Flight Mass Spectrometry |
| Microchannel Plate: | Long-Life™ Extended Dynamic Range™ |
| Gain (Minimum): | 1×10^7 at 2400 V |
| Pulse Width (Typical): | 650 ps |
| Rise Time (Typical): | 300 ps |
| Dark Count (Maximum): | 5 cps/cm ² at 1×10^7 Gain |
| Resistance (Reference): | 25 - 75 MΩ |
| Detection Diameter: | 25 mm |
| Operating Temperature Range: | -50° to +100 °C |
| Operating Pressure (Maximum): | 1.0×10^{-6} torr |
| Vacuum Flange: | 6" Conflat available |
| Electrical Connections: | SMA output connector available High Voltage: SHV available with flange Output Signal: BNC available with flange |
| DC Offset Voltage on Output (Maximum): | 500 V |

DETECTOR CONFIGURATION



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