

HAMAMATSU

ULTRA THIN MCP ASSEMBLY WITH CENTER HOLE F6589

FEATURES

- **Ultra Thin Type: 2.5 mm (Max.)**
 - Detection at closed distance from samples
- **Flexible Lead Out (polyimide film)**
 - Easy system design with a flexible wiring
 - Low outgassing for high vacuum operation
- **Light Weight**

APPLICATIONS

- SEM
- FIB System
- Mask Aligner
- Electron Beam Measuring System



TMCPF0083

SPECIFICATIONS

Parameter	Value	Unit
GENERAL		
Assembly Outer Diameter	28.0	mm
Effective Diameter	11.0	mm
Maximum Height	2.5	mm
MCP Channel Diameter	12	μm
MCP Stage Number	2	stage
Centerpipe Inner Diameter	1	mm
Dead Area around Center Hole	4	mm
Electrical Potential	MCP-in	-0.4 to +0.4
	Anode	+2.4 (Max.)
		kV

MAXIMUM RATINGS

MCP Supply Voltage (In-Out)	2.0	kV
MCP Out-Anode Voltage	0.4	kV
Anode-Substrate Voltage	2.4	kV
Operating Vacuum Condition	Less than 6.7×10^{-4} (5×10^{-6})	Pa (Torr)
Ambient Temperature	-50 to +70	°C
Baking Temperature	200	°C
Baking Time	8	hours
Vacuum Condition for Baking	Less than 6.7×10^{-4} (5×10^{-6})	Pa (Torr)

- Not allowed to be baked.

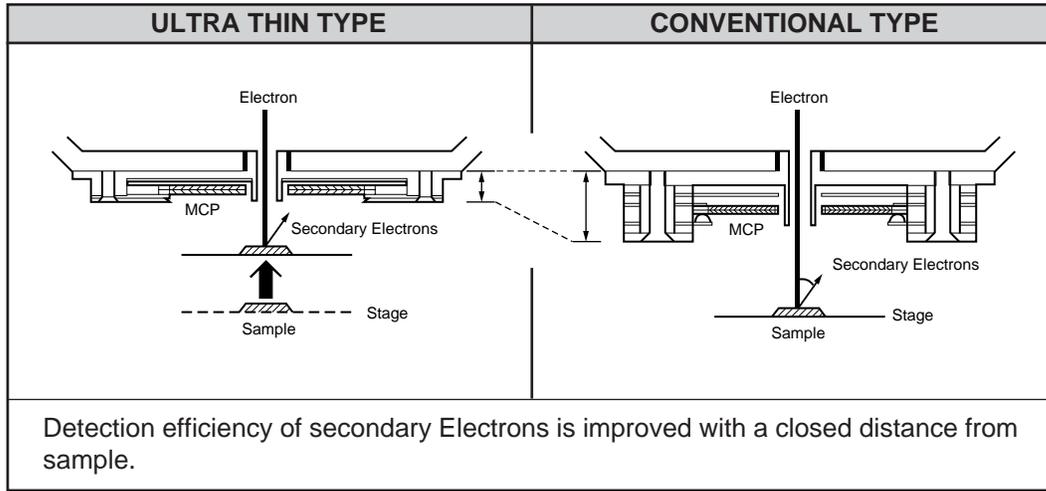
CHARACTERISTICS

Gain at 1.8kV	1×10^6 Min.	-
Plate Resistance	50 to 200	MΩ/MCP
Maximum Linear Output	7% of strip current under uniform input into whole MCP effective area	μA
DC Dark Current at 2kV	1×10^{-10}	A
Dark Count at 2kV	3	cps



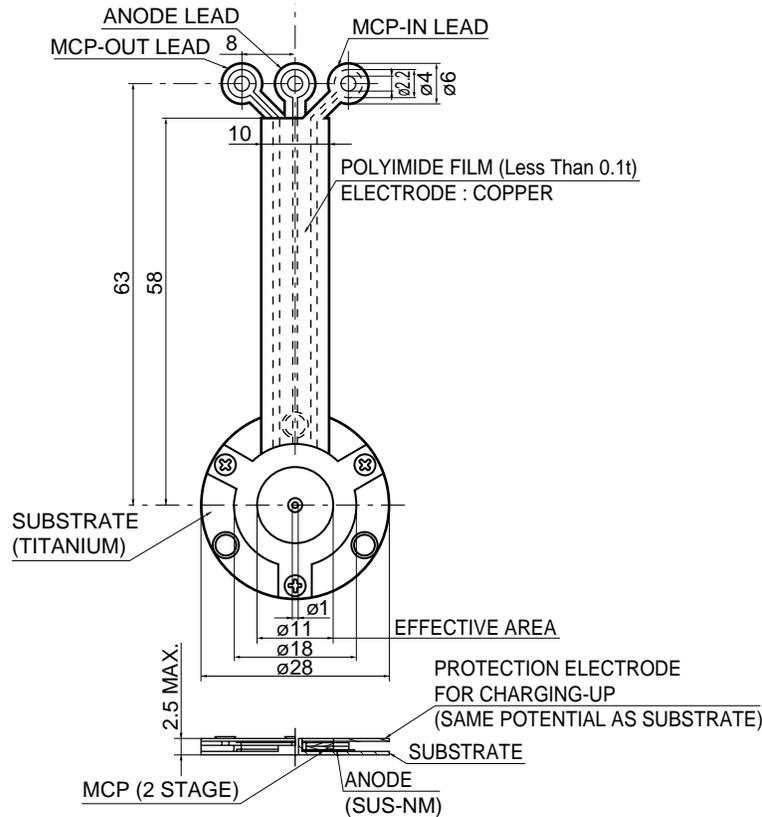
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Figure 1: Merit of Ultra Thin MCP Assembly with Center Hole



TMCP0039EA

Figure 2: Dimensional Outline (Unit: mm)



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