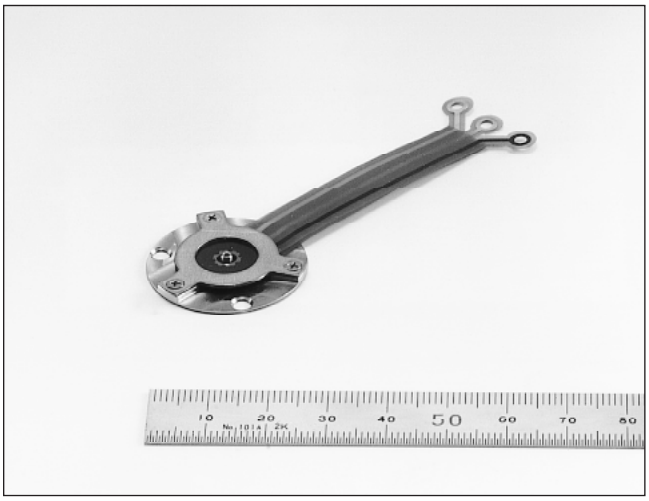
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ULTRA THIN MCP ASSEMBLY WITH CENTER HOLE F6589

FEATURES

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



TMCPF0083

APPLICATIONS

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

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	kV
	Anode	+2.4 (Max.)	
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)

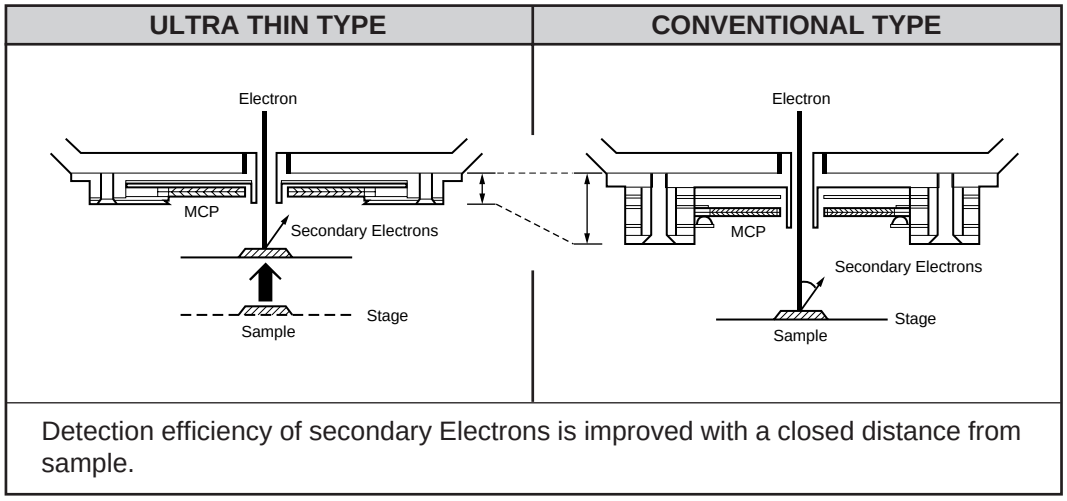
• Not allowed to be baked.

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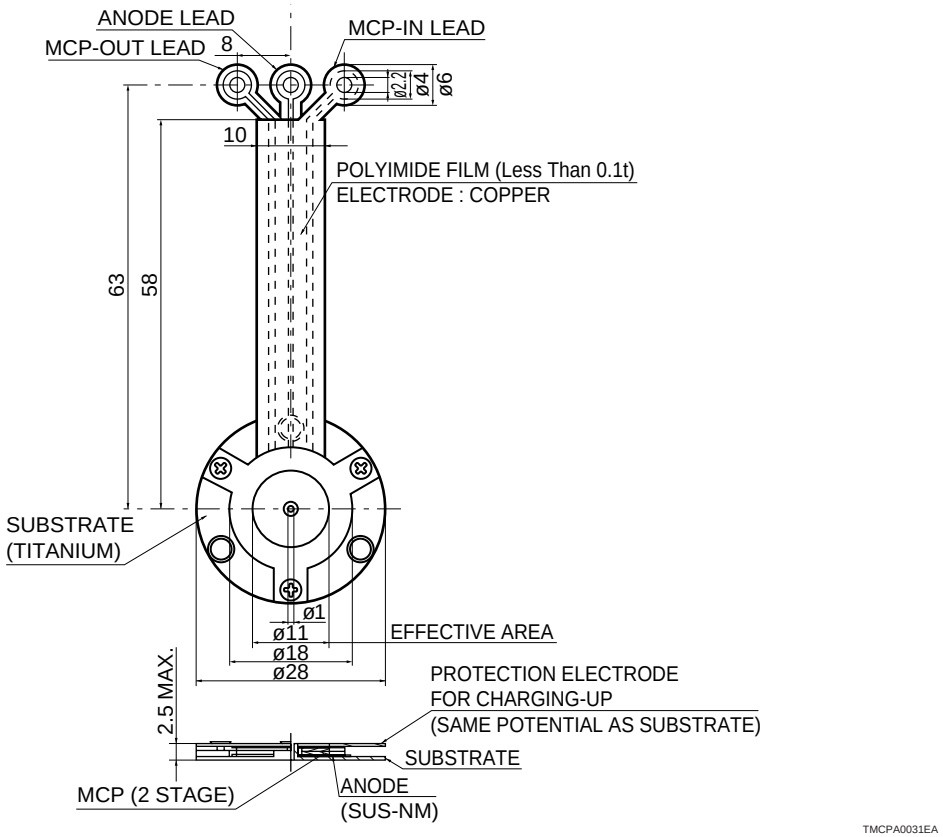
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Figure 1: Merit of Ultra Thin MCP Assembly with Center Hole



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Figure 2: Dimensional Outline (Unit: mm)



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