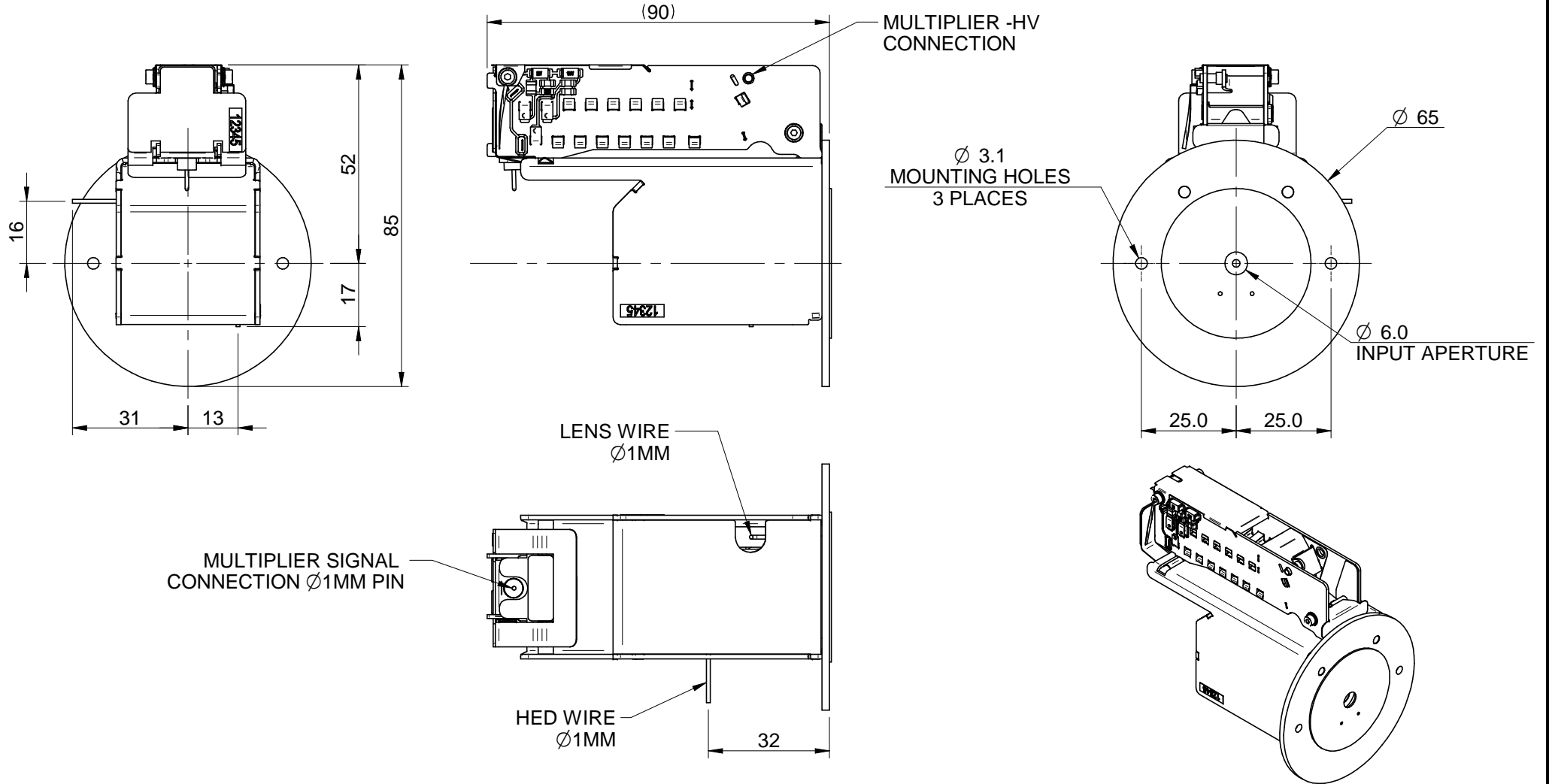


NOTE: REMOVE SILICON CAPS FROM HV LEADS PRIOR TO INSTALLATION



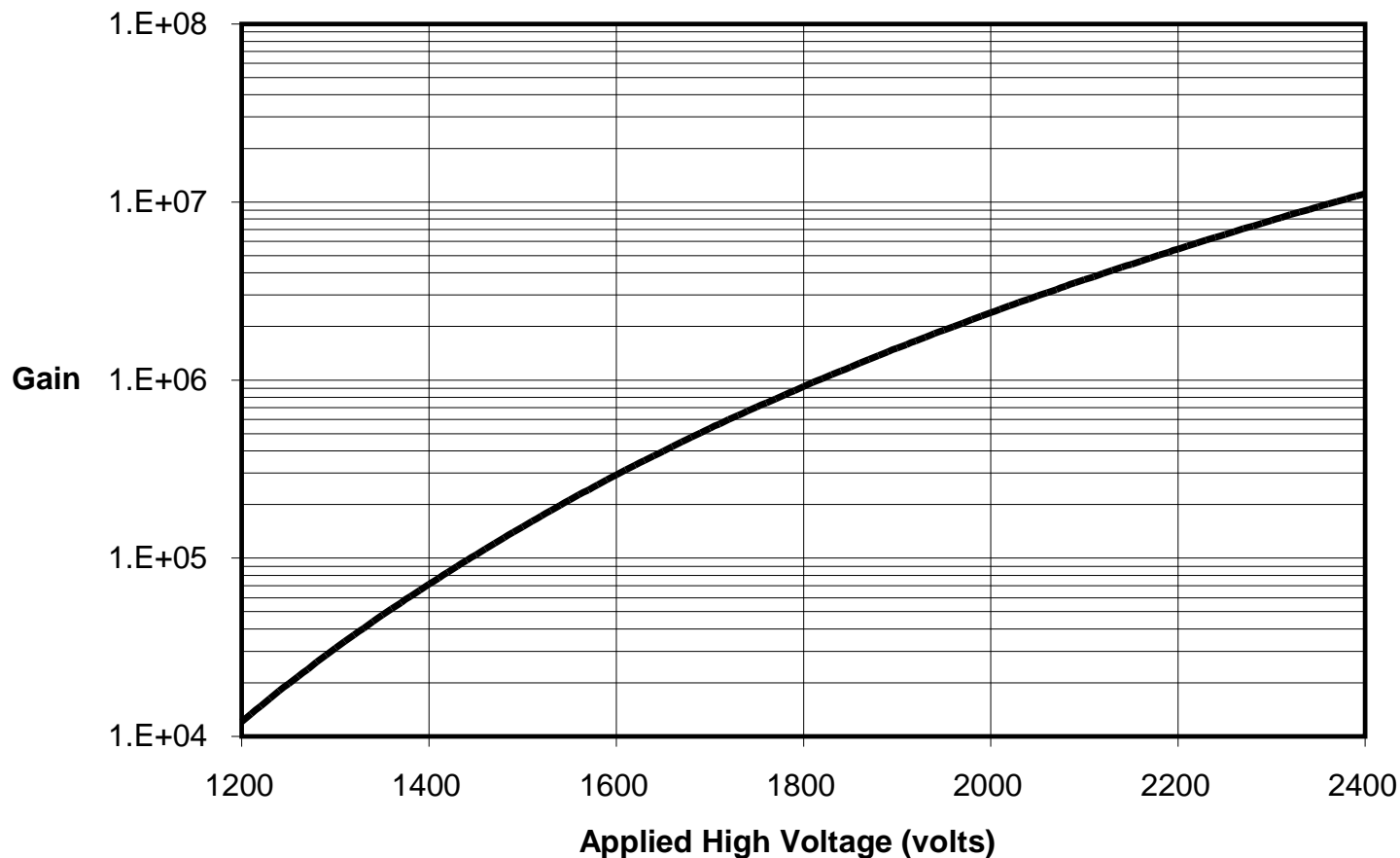
PRODUCTION APPROVAL		R. WATKINS		DATE	02/03/17	ENGINEERING APPROVAL		P. RAFFIN		DATE	02/03/17	ETP ion detect 8 MARTHA ST CLYDE NSW 2142, AUSTRALIA PH: +61(0)2 8876 0100 ACN NO. 078 955 521 FAX: +61(0)28876 0199 ABN: 35 078 955 521	
						TOLERANCE (UNLESS SPECIFIED) LINEAR WHOLE MILLIMETERS +0.5 ONE DECIMAL PLACE +0.2 TWO DECIMAL PLACES +0.1 DIAMETER WHOLE MILLIMETRES +0.5 ONE DECIMAL PLACE +0.2 TWO DECIMAL PLACES +0.1 ANGULAR WHOLE DEGREES +1° ONE DECIMAL PLACE +0.5°		MATERIAL DESCRIPTION MATERIAL TOLERANCE GENERAL FINISH FREE FROM TOOLING MARKS, BURRS AND SCRATCHES SOLID MODEL A MACHINED FINISH 1.6/ UNLESS OTHERWISE MENTIONED		TITLE MECHANICAL SPECIFICATION GCMS MULTIPLIER WITH COLLIMATOR, RoHS		DRAWN GJ DATE 01.03.17 SHEET 1 of 3 PRIOR DRAWING REF. - SCALE: 1:2 DO NOT SCALE DRAWING No. MS14664 REVISION A	
A	DRAWING ISSUED	-	GJ	01.03.17					ALL DIMENSIONS ARE IN MILLIMETERS				
REV	DESCRIPTION	ECR #	BY	DATE									


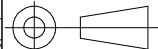
14664 HED MOUNT AND MULTIPLIER DATA SHEET

Model Number- Mount and Multiplier	14664
Number of dynodes	17
Input aperture	6mm dia
Deflector voltage range	± 600 V
Recommended HED voltage	± 10 kV
Typical voltage for 1E7 gain (new multiplier)	~ 2400 V
Maximum multiplier -HV voltage (at end of life)	3500 V
Note: Operating a new detector at maximum voltage may result in damage to the detector	
Internal multiplier resistance -HV to Gnd	9.7 MΩ - 10.7 MΩ + Zener diode voltage of ~133 V
Maximum Analog Dark Current (-HV @ -2500V, HED @ 0V)	< 1pA
Maximum operating pressure	10 ⁻⁴ Torr
Long/short term storage requirements	Protect from dust and humidity
Maximum power supply current	380 μA @ 3500 V
Electrical Connections	-HV, HED, Lens, Signal Output
Mechanical dimensions	Refer attached drawings

PRODUCTION APPROVAL		R. WATKINS		DATE	02/03/17	ENGINEERING APPROVAL		P. RAFFIN		DATE	02/03/17	 8 MARTHA ST CLYDE NSW 2142, AUSTRALIA PH: +61(0)2 8876 0100 ACN NO. 078 955 521 FAX: +61(0)28876 0199 ABN: 35 078 955 521		
						LINEAR	MATERIAL DESCRIPTION					TITLE MECHANICAL SPECIFICATION GCMS MULTIPLIER WITH COLLIMATOR, RoHS		
						WHOLE MILLIMETERS	MATERIAL TOLERANCE							
						ONE DECIMAL PLACE								
						TWO DECIMAL PLACES								
						DIAMETER	GENERAL FINISH FREE FROM TOOLING MARKS, BURRS AND SCRATCHES							
						WHOLE MILLIMETRES	SOLID MODEL							
						ONE DECIMAL PLACE	A							
						TWO DECIMAL PLACES	MACHINED FINISH 1.6 / UNLESS OTHERWISE MENTIONED							
						ANGULAR								
						WHOLE DEGREES								
A	DRAWING ISSUED	-	GJ	01.03.17		ONE DECIMAL PLACE	DRAWN GJ DATE 01.03.17 SHEET 2 of 3 PRIOR DRAWING REF. -					SCALE:	DRAWING No.	REVISION
REV	DESCRIPTION	ECR #	BY	DATE		ALL DIMENSIONS ARE IN MILLIMETERS					DO NOT SCALE	MS14664	A	

Typical gain curve for ETP 14664
(New multiplier with HED @ -10kV)



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						LINEAR WHOLE MILLIMETERS ±0.5 ONE DECIMAL PLACE ±0.2 TWO DECIMAL PLACES ±0.1		MATERIAL DESCRIPTION				TITLE		
						DIAMETER WHOLE MILLIMETRES ±0.5 ONE DECIMAL PLACE ±0.2 TWO DECIMAL PLACES ±0.1		MATERIAL TOLERANCE				MECHANICAL SPECIFICATION GCMS MULTIPLIER WITH COLLIMATOR, RoHS		
						GENERAL FINISH FREE FROM TOOLING MARKS, BURRS AND SCRATCHES SOLID MODEL A MACHINED FINISH 1.6/ UNLESS OTHERWISE MENTIONED		GENERAL FINISH FREE FROM TOOLING MARKS, BURRS AND SCRATCHES SOLID MODEL A MACHINED FINISH 1.6/ UNLESS OTHERWISE MENTIONED				SCALE: DRAWING No. REVISION		
A	DRAWING ISSUED	-	GJ	01.03.17					DRAWN GJ DATE 01.03.17 SHEET 3 of 3 PRIOR DRAWING REF. -	DO NOT SCALE		MS14664 A		
REV	DESCRIPTION	ECR #	BY	DATE			ANGULAR WHOLE DEGREES ± 1° ONE DECIMAL PLACE ±0.5°		ALL DIMENSIONS ARE IN MILLIMETERS					