TECHNICAL INFORMATION

TENTATIVE
Nov. 2017

H13795 (R13435 Hybrid Assembly)

For Scintillation Counting, Fast Time Response
51 mm (2 inch) Diameter, Bialkali Photocathode, 10-stage, Head-on Type

GENERAL

Parameter		Description / Value	Unit
Spectral Response		300 to 650	nm
Wavelength of Cathode Radiant Sensitivity		420	nm
Window Material		Borosilicate glass	-
Photocathode	Material	Bialkali	-
	Minimum Effective Area	46	mm dia.
Dynode Structure / Number of Stages		Linear Focused / 10	-
Operating Ambient Temperature		0 to +50	°C
Storage Temperature		0 to +50	°C
Recommended Supply Voltage Between Anode and Cathode		-1750	V

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	-2000	V
Average Anode Current		0.1	mA

CHARACTERISTICS (at 25 °C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856 K)	-	95	-	µA/lm
	Blue Sensitivity Index (Cs 5-58)	9	10	-	-
Anode Sensitivity	Luminous (2856 K)	80	400	-	A/lm
Gain		-	4.2×10^6	-	-
Anode Dark Current (After 30 min storage in darkness)		-	30	200	nA
Anode Pulse Rise Time		-	2.0	-	ns
Electron Transit Time		-	23	-	ns
Transit Time Spread (FWHM)		-	230	-	ps
Pulse Linearity (+/-2 % deviation)		-	30	-	mA

NOTE : Anode characteristics are measured with a voltage distribution ratio and supply voltage shown below.

VOLTAGE DISTRIBUTION RATIO

Electrodes	K	G	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8(Acc)	Dy9	Dy10	P
Ratio	1.3	4.8	1.5	1.5	1	1	1	1	1	1	1	1	

Supply Voltage: -1750 V, K: Cathode, Dy: Dynode, P: Anode, G: Grid, Acc: Accelerating electrode

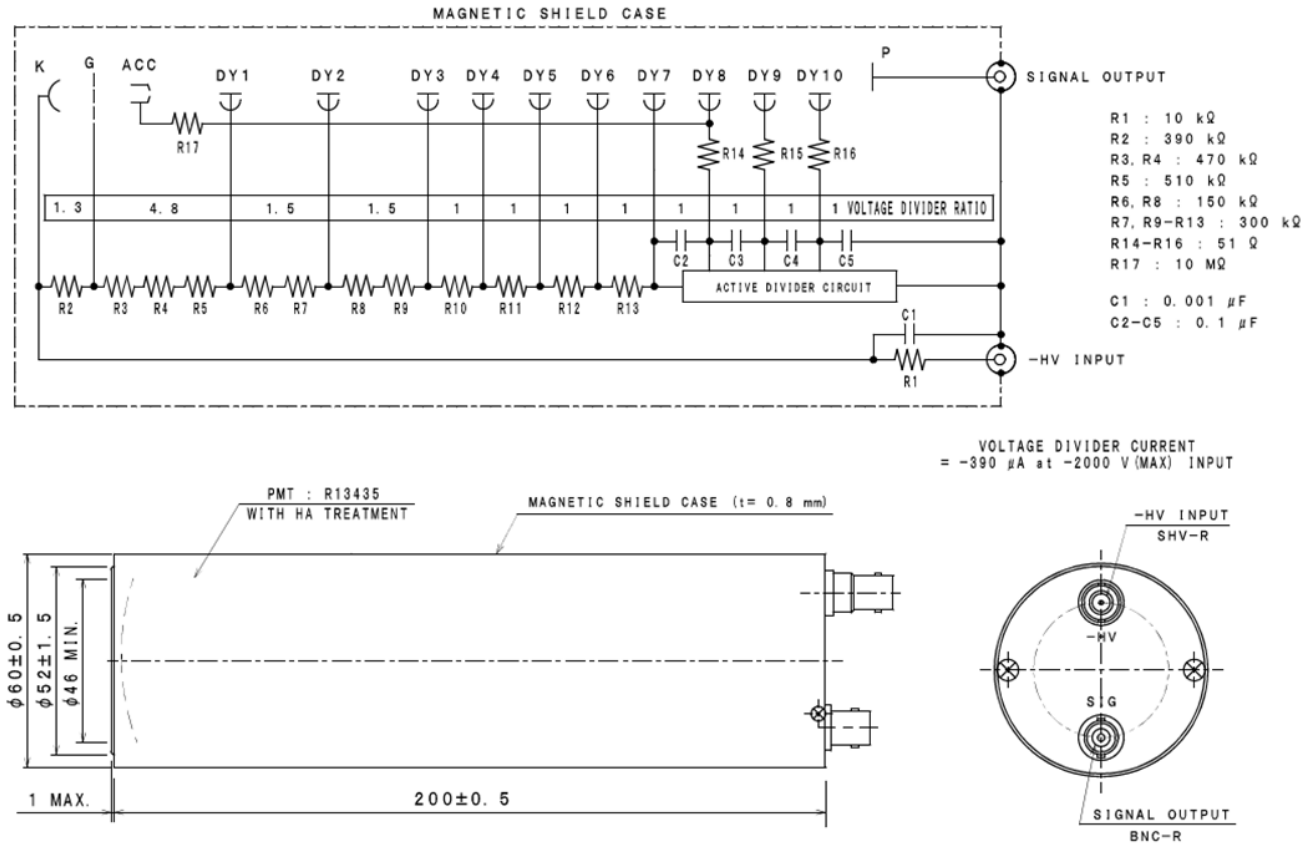

Figure 1: Dimensional Outline and Voltage Divider Circuit (Unit: mm)

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No warranty, expressed or implied, is created by furnishing this information.

NOTES

The material in the H13795 contains Copper-Beryllium (CuBe) Alloy. Please follow the applicable regulations regarding disposal of hazardous materials and industrial wastes in your country, state, region or province.