

HAMAMATSU

TENTATIVE DATA SHEET

Apr. 2011

PHOTOMULTIPLIER TUBE

R11410-10

Ceramic Stem Type

For Low Temperature Operation down to -110 deg. C
Special Bialkali Photocathode (Bialkali LT), Low Radioactivity
76 mm (3 Inch) Diameter, 12-stage, Head-on Type, Synthetic Silica

General

Parameter		Description / Value	Unit
Spectral response		160 to 650	nm
Wavelength of Maximum Response		420	nm
Window material		Synthetic silica	-
Photocathode	Material	Bialkali	-
	Minimum Effective Area	64	mm dia.
Dynode	Structure	Box & Linear-focused	-
	Number of Stages	12	-
Suitable Socket		E678-20B	-
Operating Ambient Temperature		-110 to +50	deg. C
Storage Temperature		-110 to +50	deg. C

Maximum Ratings (Absolute Maximum Values)

Parameter		Value	Unit
Supply voltage	Between Anode and Cathode	1750	V
	Between Anode and Last Dynode	300	V
Average Anode Output		0.1	mA
Pressure-resistance		TBA	atm

Characteristics at 25 deg. C

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856K)	-	90	-	uA/lm
	Quantum Efficiency at 175 nm	-	26	-	%
	Blue Sensitivity Index (CS 5-58)	-	10	-	-
Anode Sensitivity	Luminous (2856K)	-	450	-	A/lm
Gain		-	5.0×10^6	-	-
Anode Dark Current (after 30 min. storage in darkness)		-	10	100	nA
Time Response	Anode Pulse Rise Time	-	5.5	-	ns
	Electron Transit Time	-	46	-	ns
	Transit Time Spread (FWHM)	-	6.5	-	ns
Pulse Linearity at +/-2% deviation		-	20	-	mA

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

Voltage Distribution Ratio and Supply Voltage

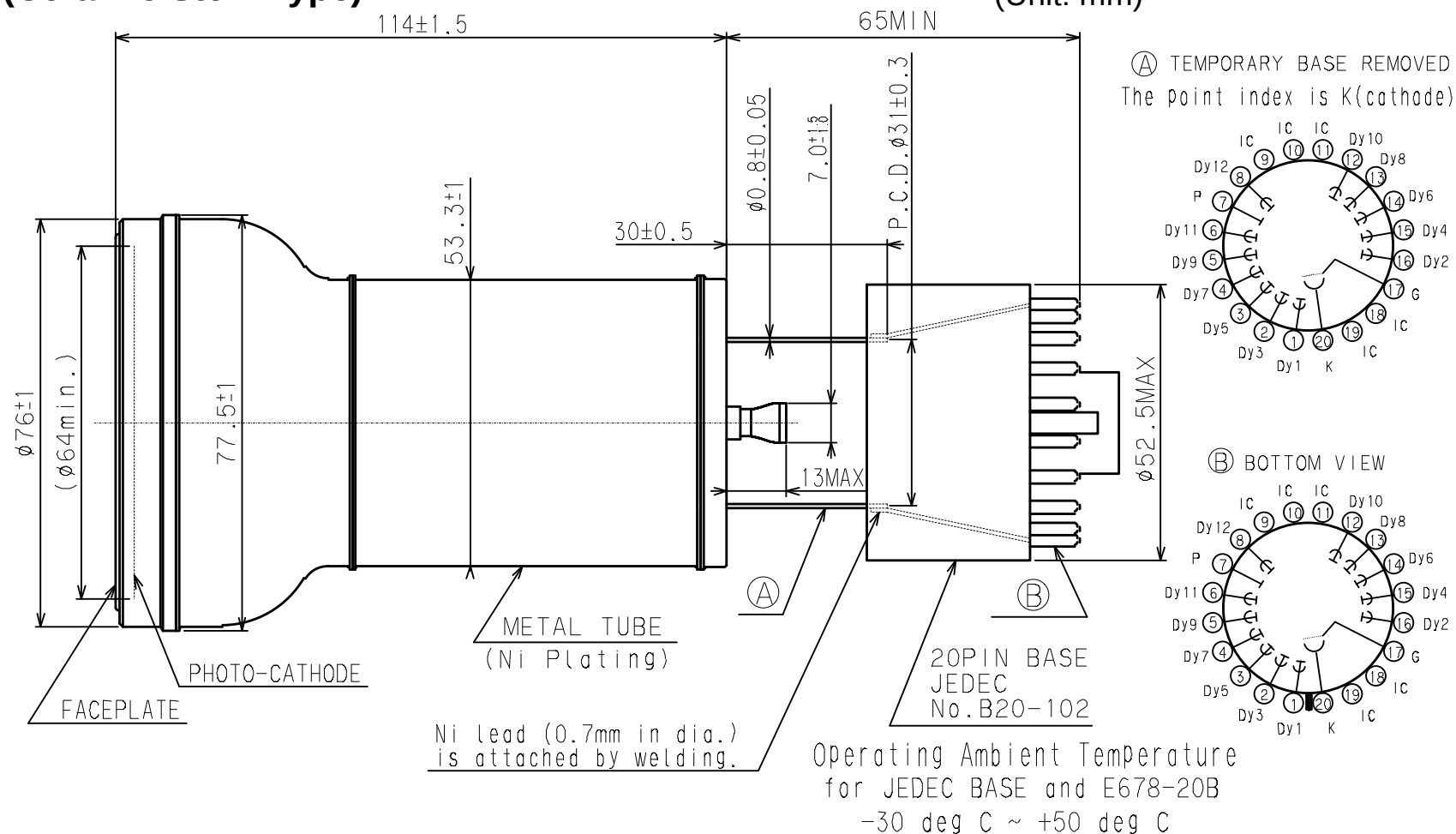
Electrodes	K	Dy1/G	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	Dy10	Dy11	Dy12	P
Ratio	4	1.5	2	1	1	1	1	1	1	1	1	2	1	

Supply Voltage : 1500 V K : Cathode G : Grid Dy : Dynode P : Anode

R11410-10 Dimensional Outline and Basing Diagram

(Ceramic Stem Type)

(Unit: mm)



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