

Photomultiplier

XP2412

**10-stage
76mm (3"), Round tube**

Application

- ✓ Gamma-cameras

Features

- ✓ High PHR
- ✓ Venetian blind



Description

Window material	Lime glass
Photocathode	Bi-alkali
Refr. Index at 420nm	1.54
Multiplier structure	Linear focused

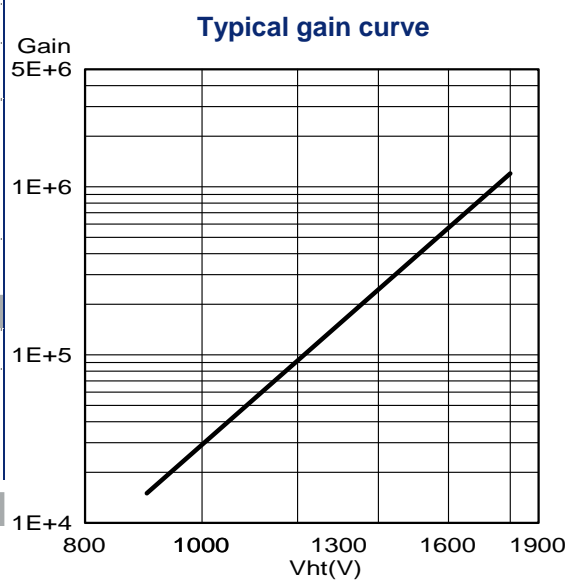
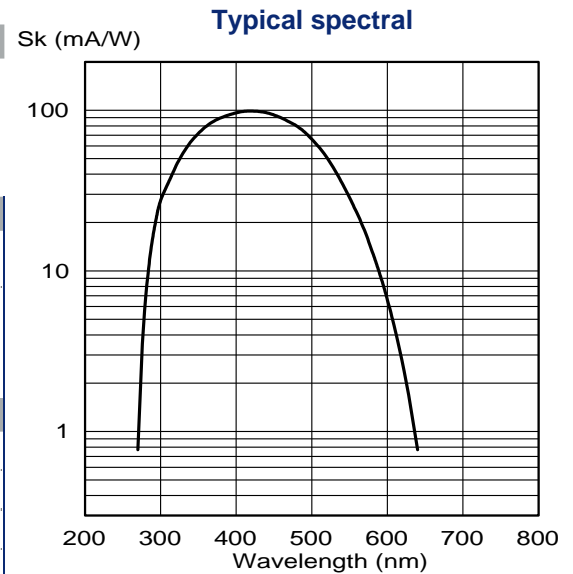
Photocathode characteristics	Min	Typ	Max	Unit
Spectral range :		290-650		nm
Maximum sensitivity at :		420		nm
Sensitivity :				
Luminous :		100		μA/lm
Blue * :	11	12.5		μA/lmf
Radiant, at 420nm		100		mA/W
Characteristics with voltage divider A	Min	Typ	Max	Unit
Gain slope (vs supp. Volt., log/log)		6.2		
For an anode blue sensitivity of		1.5		A/lmF
Supply voltage *	1000	1250	1400	V
Gain		1.2×10^5		
Anode dark current *		1	20	nA
Pulse height resolution ⁵⁷ Co*		9.5	10	%
Pulse height resolution 137 Cs		7		%
Mean anode sensitivity deviation :				
Long term (16h) :		1		%
After change of count rate :		1		%
Vs temperature between 0 and +40°C at 420nm :		-0.2		%/K
Anode sensitivity change for magnetic field of 0.05 mT :		2		%
For a supply voltage of : 1500V	Min	Typ	Max	Unit
Linearity (2%) of anode current up to :		15		mA
Anode pulse :				
Rise time :		11		ns
Duration at half height :		22		ns
Transit Time :		54		ns

Recommended Voltage Divider

Type A for maximum gain

K	G	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	A
0.5	1.5	1	1	1	1	1	1	1	1	1	1	(total : 12)

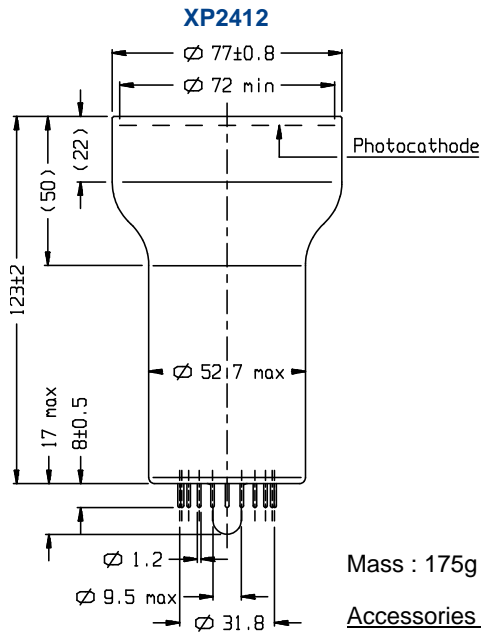
* characteristic measured and mentioned on the test ticket of each tube



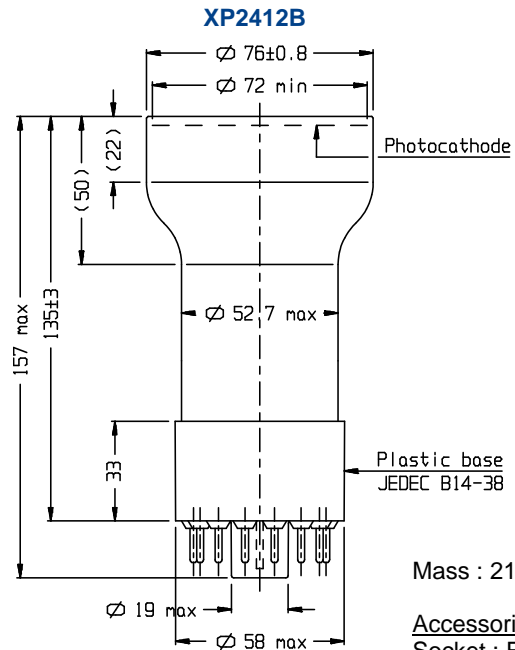
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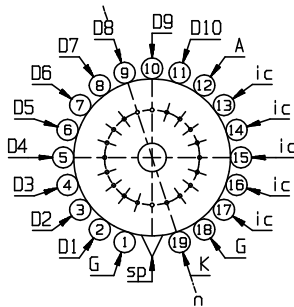
Outline (dimensions in mm)



Accessories :
Socket : FE2019
Mu-metal shield : MS153

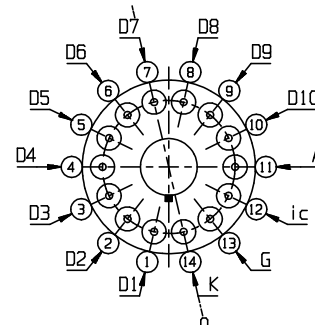


Accessories :
Socket : FE1014
Mu-metal shield : MS153
Voltage divider : VD202K



K: cathode
sp: short pin

Dn: dynode
ic: internal connection



A: anode
n: plane of symmetry of the multiplier
G: focusing electrode

Limiting values	Min	Max	Unit
Anode Luminous sensitivity		15	
Supply voltage		2000	V
Continuous anode current		0.2	mA
Voltage between :			
G and photocathode :		500	V
D1 and photocathode :	150	500	V
Consecutive dynode :		500	V
Anode and D10 :	40	300	V
Ambient temperature :			
Short operation (<30 mn) :	-30	+80	°C
Continuous operation & storage :	-30	+50	°C

Variants

XP2412

Finishing

B with plastic base JEDEC B14-38
F with flying leads Ø 0.5
FB with flying leads and plastic base

Option

C with electrostatic coating
(conductive paint connected to the cathode + insulating coating)

Also, other variants can be made. Please, contact us to discuss any specific product requirements.