

Electrical Characteristics and Ratings

Type	PHYSICAL CHARACTERISTICS			CATHODE SENSITIVITY								ANODE SENSITIVITY				DARK EMISSION AT NOMINAL A/lm			
	Spectral response	Dynodes	Effective cathode size mm	μA/lm		Corning blue		Corning red		Infra red		QE% peak	A/lm	V _{k-a}		Gain x10 ⁶	I _a (dark) nA		Count s ⁻¹
				nom	min	typ	min	typ	min	typ	min			typ	min		typ	max	
9266B	Bialk	10LF CsSb	45		80	9	12		1.5		28	50	900	1100	0.6	0.2	1.5	300	
9250B	Bialk	10LF CsSb	45		80	7	12		1.7		28	50	820	1150	0.6	0.1	1	300	
9205B	Bialk	10LF CsSb	45		80	7	12		1.5		28	200	1000	1350	2.5	0.5	20	300	
9256B	RbCs	10LF CsSb	45		110	7	12		10		27	50	850	1000	0.5	0.2	1.5	500	
9257B	RbCs	10LF BeCu	45		110	7	12		10		27	50	1020	1500	0.5	0.2	1.5	500	
9956B	RbCs	10VB CsSb	45		90	7	11		4		26	50	900	1150	0.6	0.2	1.5	400	
9215B	Bialk	8LF CsSb	45		80	7	12		1.5		28	10	900	1100	0.1	0.05	2	-	

Series characteristics

These photomultipliers have low background windows. Quartz (fused silica) windows are also available as an option. Most are available in hard pin, flying lead with temporary B14A cap or permanent B14A cap options; with suffix B, KBFL and KB respectively. 9205, 9250 and 9956 are available in B and KB versions only.

● **9266 (parent type)**

This is a high gain photomultiplier for scintillation spectroscopy. Typical pulse height resolution figures obtained with a NaI(Tl) test crystal are: ¹³⁷Cs=7.3%; ⁵⁷Co=10.5%. This tube has excellent stability versus changing temperature, count rate and time. A detailed technical data sheet is available.

● **9250**

This type supersedes the earlier 9750 for use in thermo-luminescent dosimetry, liquid scintillation counting and other low light level applications.

● **9205**

This is an alternative to the 6097 and 9957 venetian blind photomultipliers and can replace them in existing equipment.

● **9256**

The 9256 is a version of the 9266 with a rubidium bialkali photocathode for increased green response.

● **9257**

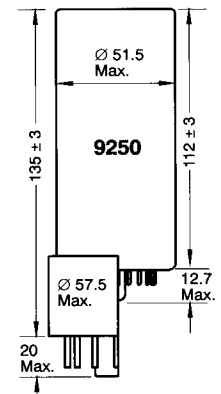
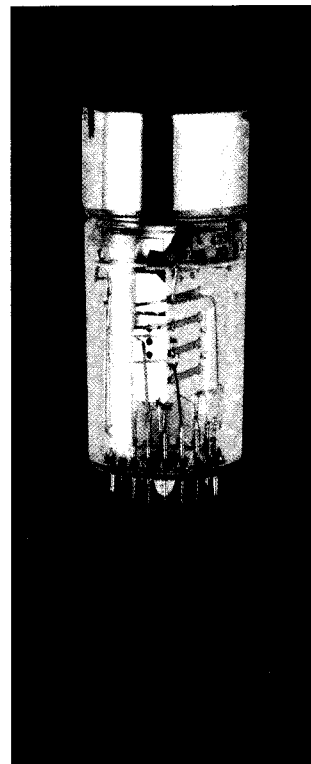
This photomultiplier is a lower gain version of the 9256 with BeCu dynodes. The consequent higher operating voltage improves linearity and timing.

● **9956**

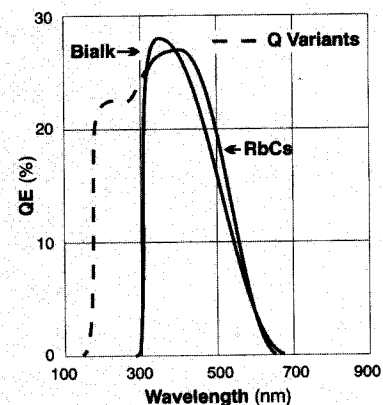
This photomultiplier is an earlier type for scintillation counting.

● **9215**

Intended for Gamma camera and other scintillation counting applications requiring good resolution, stability, linearity and low rate effect.



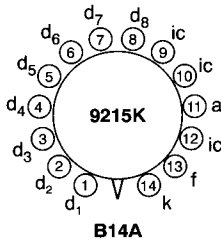
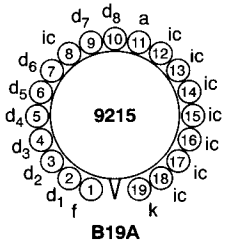
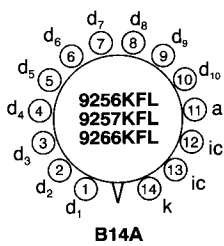
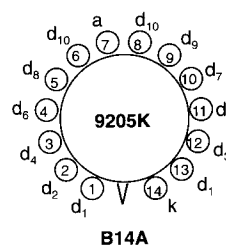
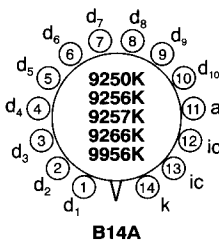
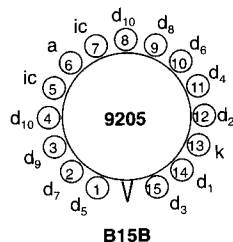
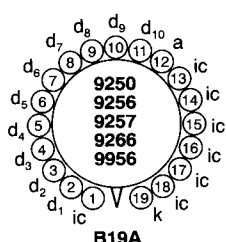
Spectral Response



Type	SER	TIME RESPONSE ns				RATINGS - subject to not exceeding maximum rated A/lm						VOLTAGE DIVIDER
		Rise time	Pulse width (fwhm)	Transit time	Jitter (fwhm)	A/lm	V_{k-d1}	V_{d-d}	V_{k-a}	I_k nA	I_a μ A	
	p/v	typ	typ	typ	typ	max	max	max	max	max	max	See Page 62
9266B	2.0	4	5.5	37	5.9	500	300	300	2000	50	100	B
9250B	2.0	4	6.5	42	5.9	500	300	300	1800	100	200	B
9205B	2.0	4	6.6	39	5.9	2000	300	300	1800	100	200	B
9256B	2.0	4	6.6	39	5.9	500	300	300	1500	100	200	B
9257B	2.0	3.5	5	35	5	500	300	300	1800	100	200	B
9956B		12	25	65		500	300	300	2000	50	200	E
9215B	2.0	4	5.5	33		100	300	300	2000	50	100	D

Pin connections

(Viewed from below. V indicates position of short pin or key; ic = internal connection). The corresponding socket type number is shown below each diagram. See data sheet for recommended connection for focus electrode, f.



Gain Curves

