

ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PHOTOMULTIPLIER

1P22

Specialized - Photo Tube electronic tube

RCA 1P22 nine-stage side-on S-8 photomultiplier tube with cesium-bismuth photocathode and cesium-antimony dynodes, designed for colorimetry, spectroscopy and low-light measurement.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	11
NOMINAL HEATER	— / —	PARALLEL HEATER	— / —
HEATING	Indirect; cold cathode	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Photomultiplier	
MAXIMUM PLATE VOLTAGE	1250 V
RCA 1P22 nine-stage S-8 side-on photomultiplier. Maximum anode-to-cathode supply 1250 V DC/peak AC; maximum anode-to-dynode9 250 V, each consecutive dynode gap 250 V, dynode1-cathode 250 V. Average ANODE output current max 1 mA, peak ANODE current max 10 mA (1948); not cathode current ratings. Typical at 1000 V supply: gain ~330000, luminous sensitivity ~1 A/lm; at 750 V gain ~48000, sensitivity ~0.145 A/lm (1963). Peak spectral response 365±50 nm in 1963 RCA data, 420±50 nm in 1948 RCA data. Cesium-bismuth photocathode, nine cesium-antimony dynodes. Anode-dynode9 capacitance ~4-4.4 pF, anode-to-other ~6-6.5 pF. Ambient max 50 °C, no heater.	