

ELECTRONIC TUBE REFERENCE

1P29

Specialized - Photo Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PHOTOEMISSIVEDETECTOR

RCA 1P29 gas-filled side-on S-3 photoemissive detector with semicylindrical photocathode, peak response near 420 nm, and gas amplification up to 9.

GENERAL CHARACTERISTICS

BASE DESIGNATION	2K	BASE PINS	4
NOMINAL HEATER	– / –	PARALLEL HEATER	– / –
HEATING	Indirect; cold cathode	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1	PhotoemissiveDetector
MAXIMUM PLATE VOLTAGE	100 V
RCA 1P29 gas-filled S-3 side-on photoemissive detector. 1961 two alternative rating regimes: Rating I anode supply max 80 V, average photocathode current max 10 μA, density max 50 μA/in²; Rating II anode supply max 100 V, average photocathode current max 5 μA, density max 25 μA/in². Promoted 100 V is valid ONLY with Rating II 5 μA/25 μA-in² restrictions; do not combine with Rating I current. Earlier 1944 max average cathode current 20 μA superseded. Gas amplification factor ≤9. Peak S-3 response 420±100 nm, radiant sensitivity ~0.011 A/W at 420 nm, median luminous sensitivity 40 μA/lm DC, 35 μA/lm at 5 kHz, 31 μA/lm at 10 kHz. Anode dark current max 0.10 μA at 25 °C; capacitance ~3 pF; max ambient 100 °C. Minimum load resistance conditional on voltage/current.	

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