ELECTRONIC TUBE REFERENCE

1P41

Specialized - Photo Tube electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PHOTOEMISSIVEDETECTOR

RCA 1P41 gas-filled head-on S-1 photoemissive detector with red/near-infrared sensitivity, peak response near 800 nm and gas amplification up to 8.5.

General characteristics

BASE DESIGNATION	_	**BASE PINS**	3
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	90 V

RCA 1P41 gas-filled S-1 head-on photoemissive detector. 1957 alternative absolute rating regimes: Rating I anode max 70 V, average cathode current max 3 µA, current density max 40 µA/in²; Rating II anode max 90 V, average cathode current max 1.5 µA, density max 20 µA/in². Promoted 90 V conditional on Rating II, cannot combine with Rating I current. Earlier 1950 peak cathode current max 5 µA. Max ambient 100 °C. Peak S-1 response 800±100 nm, median radiant sensitivity 0.008 A/W at 800 nm; median luminous sensitivity 90 µA/lm DC, 77 µA/lm at 5 kHz, 67 µA/lm at 10 kHz. Gas amplification factor max 8.5, dark current max 0.1 µA at 25 °C, interelectrode capacitance 1.8 pF. No heater.

Tube Tinker

An independent reference for electronic tubes, vacuum tubes, and their source documents.

Catalog Tube types Full books Blog Feedback & corrections

© 2026 Tube Tinker