

ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA

1P31

1 SECTION

CONSTRUCTION

Specialized - Photo Tube electronic tube

PHOTOEMISSIVEDETECTOR

Gas-filled two-electrode S-1 phototube for photoelectric measurement and light-detection applications.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1 PhotoemissiveDetector	
MAXIMUM PLATE VOLTAGE	95 V
Gas-filled two-electrode phototube; S1 spectral response.	

1P31 is a gas-filled phototube intended for photoelectric light detection, with published spectral response, sensitivity, dark-current and cathode-current ratings.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1945 Continental Electronics

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1945 CONTINENTAL ELECTRONICS

Section 1 · PhotoemissiveDetector

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Spectral Response	S1	—
Luminous Sensitivity	55— $\mu\text{A}/\text{lm}$	95 V; 0 cycles
Gas Amplification	10	Maximum
Wavelength Maximum Response	8000 angstrom	Approximate
Sensitivity at Maximum Response	0.007 $\mu\text{A}/\mu\text{W}$	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Dark Current	—0.1 μA	95 V
Cathode Current Density	—100 $\mu\text{A}/\text{in}^2$	Maximum
Average Cathode Current	—20 μA	0.2 sq in sensitive cathode area

TUBE TINKER

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and their source documents.

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