

ELECTRONIC TUBE REFERENCE

8049

Specialized - Photo Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PHOTOEMISSIVEDETECTOR

Cesium-antimony head-on vacuum photodiode designed for low light levels and low applied voltages. Low dark current and visible-spectrum sensitivity make it suitable for direct photoelectric measurement without internal multiplication.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	— / —	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 PhotoemissiveDetector	
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM CATHODE CURRENT	0.005 mA
Published promoted fields populated by semantic section ownership; identical repeated sections compressed.	

The 8049 is a cesium-antimony head-on vacuum photodiode designed for low light levels and low applied voltages, with low dark current and useful visible-spectrum sensitivity.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

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

1961 TUNG SOL

Section 1 · PhotoemissiveDetector

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PeakCathodeCurrentDensity	125 $\mu\text{A}/\text{in}^2$	—
Average Cathode Current	5 μA	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 4 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 4 OF 4

Section 1 · PhotoemissiveDetector

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Wavelength of maximum response	3500–4500 angstrom	WholeTube
Direct interelectrode capacitance	1.3 pF	WholeTube
Luminous sensitivity average	15–60 $\mu\text{A}/\text{lumen}$	WholeTube
Direct	1.3 pf	PublishedTable
Voltage (Dc	-0.3 volTs	PublishedTable
Dark Current	25 VOLTS	PublishedTable
Luminous Sensitivity	60 μA	PublishedTable

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak cathode current maximum	20 uA	WholeTube
Average cathode current maximum	5 uA	WholeTube
Wavelength Of Maximum Response	500 ANGSTROMS	PublishedTable
Maximum Peak Cathode Current	20 AMP	PublishedTable