

ELECTRONIC TUBE REFERENCE

1P39

Specialized - Photo Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PHOTOEMISSIVEDETECTOR

RCA 1P39 high-vacuum S-4 blue-sensitive photoemissive detector, electrically similar to RCA 929 but with a non-hygroscopic base for low leakage under high humidity.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
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	250 V
MAXIMUM CATHODE CURRENT	0.005 mA
RCA 1P39 high-vacuum S-4 blue-sensitive photoemissive detector. Explicit 1P39 maximum dark current 0.005 μA at 250 V (1947 RCA). Otherwise inherits RCA 929 electrical characteristics: max anode supply 250 V DC/peak AC, max average cathode current 5 μA, max cathode current density 25 μA/in², ambient max 75 °C. Peak spectral response 400±50 nm, median luminous sensitivity 45 μA/lm, median radiant sensitivity 0.044 A/W at 400 nm, capacitance ~2.6 pF. 1P39 non-hygroscopic base provides ~10x higher anode-cathode pin insulation under high humidity than 929 conventional base. No heater.	