



ELECTRONIC TUBE REFERENCE

TH1

Specialized - Sensor Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
SENSOR

Subminiature vacuum thermocouple current sensor for low-current instrumentation. Electrical current heats an internal element and produces a small thermoelectric voltage proportional to current.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION 1 Sensor

No fixed ratings recorded.

Thermocouple measuring element; current ranges retained as parameters.

Thermocouple current-measuring device with maximum heater current of 20 mA.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1957 Philips Receiving and Amplifying Tubes

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

1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

Section 1 · Sensor

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum heater current	20 mA	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current for 12 mV output	10 mA	—

SOURCE OPERATING CONDITIONS

1999 Philips E-Z

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

1999 PHILIPS E-Z

Section 1 · Sensor

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current range	0-15 mA	—
Approximate square-law proportional range	0-5 mA	—
Heater current at 12 mV output	10 mA	—
Heater resistance	6.8 ohm	—
Thermocouple resistance	6 ohm	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Response time	10 sec	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum heater current for 1 minute	20 mA	—
Maximum heater-to-thermocouple voltage	100 V	—

TUBE TINKER

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

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