



ELECTRONIC TUBE REFERENCE

1850902

Specialized - Radiation Counter electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

GEIGERMULLERCOUNTER

18509/02 miniature self-quenching Geiger-Müller counter for gamma and high-energy beta radiation. This variant provides a short dead time and compact construction for relatively high-rate radiation counting.

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 GeigerMullerCounter

No fixed ratings recorded.

Gas-filled radiation-counter section; counter-specific electrical characteristics are retained in TUBE_SECTION_PARAMETER.

18509/02 miniature self-quenching Geiger-Müller counter for gamma and high-energy beta radiation. The supplied Philips sheet was read in English from the multilingual English/French/German data, including operating voltage, plateau behavior, background count, timing, life, and construction data where published.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips 0-D

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

1999 PHILIPS 0-D

Section 1 · GeigerMullerCounter

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filling	Neon, argon and halogen quenching agent	—
Cathode wall thickness	80-100 mg/cm2	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Interelectrode capacitance	1 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode resistor	2 Mohm	—
Operating voltage minimum	500 V	—
Operating voltage maximum	650 V	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Starting voltage minimum	335 V	—
Starting voltage maximum	375 V	—
Dead time maximum	30 usec	—
Plateau slope maximum	0.15 %/V	Vp=500-650V
Shielded background maximum	2 counts/min	2inPb;1/8inAl
Expected count life minimum	50000000000 counts	—

TUBE TINKER

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

