



ELECTRONIC TUBE REFERENCE

4069

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Subminiature electrometer triode for linear and logarithmic very-low-current measurement, including operation using a controlled relationship between positive grid current and anode current.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	1.25 V / 14 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
PLATE RESISTANCE	20000 Ω
AMPLIFICATION FACTOR	2
Published electrical values are also captured in parameter rows.	

Electrometer triode for very-low-current measurement. Philips 4069; 4069 ELECTROMETER TUBE
Subminiature electrometer triode for linear and logarithmic use with a control- led logarithmic relationship between positive grid current and anode current. QUICK REFERENCE DATA Filament
voitage V_{ϕ} 1.25 VvV Anode voltage V_a

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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode current I_y	100 μA	Anode current I_y 100 μ A
Grid current $-I_l < 10$	-12 A	Grid current $-I_l < 10$ -12 A
Filament current I_f	14 mA	Filament current I_f 14 mA
Anode to all except grid $C_a(g)$	0.8 pF	Anode to all except grid $C_a(g)$ 0.8 pF
Grid to all except anode $C_g(a)$	0.5 pF	Grid to all except anode $C_g(a)$ 0.5 pF
Anode to grid C_{ag}	2 pF	Anode to grid C_{ag} 2.0 pF
Anode voltage V_a	9 v	Anode voltage V_a 9.0 v
Grid voltage $V_g -2,7 -2.0 0$	3.75 V	Grid voltage $V_g -2,7 -2.0 0$ 3.75 V
Anode current I	100 MA	Anode current I 100 MA
point 2y (I	145 μA	point 2y ($I = 145 \mu$ A) $V_g -1.4 < 1.7$ V
Published electrical value	3x1079 A	3x 1079 A, With H, = 3x 1079 A, V_g can be set to some value within the
range from 3 to	6 V	range from 3 to 6 V (nominal 4.4 V) such that I falls by 50 μ A when H_g is
reduced to $3 \times 10 \sim$	12 A	reduced to $3 \times 10 \sim 12$ A, The initial value of I_y will be found in the range from