



ELECTRONIC TUBE REFERENCE

A106

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Cold-cathode glow-discharge Dekatron intended for counting, switching, and counting/calculating equipment. A blue visible glow transfers between cathodes as the device advances, combining electronic counting or commutation with direct visual indication.

GENERAL CHARACTERISTICS

BASE DESIGNATION	Philips 4-pin	BASE PINS	4
NOMINAL HEATER	1.15 V / 60 mA	PARALLEL HEATER	– / –
HEATING	Indirect; cold cathode	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	15000 Ω
TRANSCONDUCTANCE	0.0004 S
AMPLIFICATION FACTOR	6
MAXIMUM PLATE VOLTAGE	100 V
Electrical values not fitting canonical promoted fields are preserved in TUBE_SECTION_PARAMETER.	

Russian cold-cathode glow-discharge Dekatron intended for counting, switching, or counting-and-calculating equipment. It transfers a visible discharge among cathodes; blue glow is used for indication.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

196X Nixie Russian 1

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

196X NIXIE RUSSIAN 1

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Scale factor	10	Published datasheet value
Anode supply voltage	450— V	Published datasheet value
Discharge starting voltage	—420 V	Published datasheet value
Discharge maintaining voltage	255–295 V	Published datasheet value
Subcathode bias voltage	30–40 V	Published datasheet value
Reset pulse amplitude	75–125 V	Published datasheet value
Operating current	1.1–1.4 mA	Published datasheet value
Counting rate	0.01–100000 Hz	Published datasheet value
Control pulse amplitude	80–110 V	Published datasheet value
Control pulse duration	3–10 us	Published datasheet value
Control pulse rise time	0.3–1 us	Published datasheet value
Service life	2000— h	Published datasheet value

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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage range	1–1.3 V	Published datasheet value
Filament current	60 mA	Published datasheet value
Saturation current	10 mA	Published datasheet value
Maximum quiescent current	—6 mA	Published datasheet value
Amplification factor	6	Published datasheet value
Maximum transconductance	—0.4 mA/V	Published datasheet value
Minimum internal resistance	15000— Ω	Published datasheet value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage range	20–100 V	Published datasheet value