



ELECTRONIC TUBE REFERENCE

IN13

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

NIXIE

Russian cold-cathode glow-discharge linear bar indicator for analog visual indication of electrical signals rather than discrete digits.

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 Nixie	
MAXIMUM REGULATOR CURRENT	4.3 A
STARTING VOLTAGE	140 V
Electrical values not fitting canonical promoted fields are preserved in TUBE_SECTION_PARAMETER.	

The IN13 is a Russian cold-cathode glow-discharge Nixie linear bar indicator intended for visual indication. Ignition voltage up to 140 v, published life at least 1000 h. The supplied Russian datasheet was translated for this record.



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 · Nixie

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Brightness	30 nt	Published datasheet value
Anode-to-auxiliary-cathode firing voltage	—140 V	Published datasheet value
Anode-to-indicator-cathode burning voltage	102–108 V	Published datasheet value
Auxiliary cathode current	0.09–0.13 mA	Published datasheet value
Linear luminous length	100 mm	Published datasheet value
Nonlinearity	-2–2 %	Published datasheet value
Guaranteed life	1000 h	Published datasheet value



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

196X Nixie Russian 2

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

196X NIXIE RUSSIAN 2

Section 1 · Nixie

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ignition delay time	—1 s	Published datasheet value
Indicator current at 112 mm luminous length	3.8–4.3 mA	Maximum luminous length

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum indicator current at working section	0.3–0.6 mA	Published datasheet value
Brightness nonuniformity	—2 %	Published datasheet value
Auxiliary cathode current	—0.13 mA	Published datasheet value
Supply voltage	140— V	Minimum stated source/supply voltage
Ignition voltage	—140 V	Published datasheet value
Indication current	—4.3 mA	Published datasheet value

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode-to-indicator voltage drop	102–107 V	Published datasheet value
Luminous section length	100 mm	Published datasheet value
Brightness	30— cd/m ²	Minimum
Brightness	30— cd/m ²	Minimum
Service life	1000— h	Minimum

TUBE TINKER

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