

ELECTRONIC TUBE REFERENCE

Z502S

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

NIXIE

Cold-cathode bidirectional decade selector for electronic counting, sequencing, and selection circuits.

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
No fixed ratings recorded.
Cold-cathode gas-filled bidirectional decade counter/selector tube with ten main cathodes.

Z502S is a cold-cathode bi-directional decade selector, classified as Nixie for this batch. The supplied datasheet was reviewed for operating conditions, ratings, and display/counting characteristics.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V2

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V2

Section 1 · Nixie

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode maintaining voltage at 300 μ A	186–196 V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical anode current	340 μ A	Counting
Maximum voltage between non-anode electrodes	—140 V	—
Maximum main/auxiliary cathode current	—550 μ A	—
Number of main cathodes	10 count	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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 · Nixie

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum counting rate	4 kHz	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum input-signal interval	250 μs	—
Maintaining anode voltage	191 V	$I_k=300\mu A$

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