ELECTRONIC TUBE REFERENCE

ZM1024

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
NIXIE

Cold-cathode symbol indicator intended for direct electronic character readout. Its shaped glow-discharge cathodes display specialized symbols, with manufacturer sources documenting operating conditions and mechanical/display characteristics.

General characteristics

BASE DESIGNATION	Special 13-pin	**BASE PINS**	13
NOMINAL HEATER	– / –	**PARALLEL HEATER**	– / –
HEATING	Indirect; cold cathode	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Nixie

MAXIMUM PLATE VOLTAGE	170 V
MAXIMUM CATHODE CURRENT	2.5 mA
MINIMUM REGULATOR CURRENT	1 A
MAXIMUM REGULATOR CURRENT	3 A
STARTING VOLTAGE	170 V
MAINTAINING VOLTAGE	140 V

Single indicator/counting section. Nixie-specific electrical ratings and operating data are retained in TUBE_SECTION_PARAMETER.

ZM1024 is a cold-cathode symbol indicator, classified as Nixie for this batch. The supplied datasheet provides cold-cathode display ratings, operating conditions, and mechanical/display information.

SOURCE OPERATING CONDITIONS

1969 Nixie Valvo

SOURCE PDF

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

1969 NIXIE VALVO

Section 1 · Nixie

CHARACTERISTICS		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Ignition voltage	**170 V**	Typical
Burning voltage	**140 V**	Typical
Extinction voltage	**118 V**	Typical
Life with changing display	**100000 h**	At 2 mA; change every 1000 h or more often
Symbol display	**direct glow symbols**	Cold-cathode symbol indicator
Base	**Special 13-pin**	Socket B8S 702 28 / alternatives

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Continuous cathode current	**1–3 mA**	Absolute range
Recommended cathode current	**2 mA**	Published operating point
Maximum pulse cathode current	**—10 mA**	Pulse operation
Envelope temperature	**—70 degC**	Absolute maximum

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

196X Nixie Random Datasheets

SOURCE PDF

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

196X NIXIE RANDOM DATASHEETS

Section 1 · Nixie

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Supply Voltage Minimum	**170 V**	Published datasheet value
Extinguishing Voltage Minimum	**120 V**	Published datasheet value
Cathode/Anode Current Minimum	**1 mA**	Published datasheet value

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Ignition Voltage Maximum	**160 V**	Published datasheet value
Cathode/Anode Current Maximum	**2.5 mA**	Published datasheet value

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