



## ELECTRONIC TUBE REFERENCE

# Z522M

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA

**1 SECTION**

CONSTRUCTION

**NIXIE**

Gas-filled cold-cathode Nixie numerical indicator designed for decimal readout by selective glow discharge of shaped numeral cathodes.

## GENERAL CHARACTERISTICS

|                     |                        |                      |               |
|---------------------|------------------------|----------------------|---------------|
| BASE DESIGNATION    | 13-17 TGL 68-87        | BASE PINS            | —             |
| NOMINAL HEATER      | — / —                  | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect; cold cathode | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes      | SECTION CONSTRUCTION | Similar       |

## SECTION RATINGS

|                                                                                        |       |
|----------------------------------------------------------------------------------------|-------|
| <b>SECTION 1</b> Nixie                                                                 |       |
| MAXIMUM PLATE VOLTAGE                                                                  | 170 V |
| MAXIMUM CATHODE CURRENT                                                                | 6 mA  |
| <i>Cold-cathode glow-display section; maximum cathode current promoted in amperes.</i> |       |

Z522M is a cold-cathode Nixie numerical/symbol indicator tube. The supplied RFT sheet gives 150 V ignition and 140 V burning voltage, a 170 V minimum operating supply, 3-6 mA cathode current, and 30 mm side-viewed symbols. Page 5 identifies Z522M as comparable to Z566M; electrical/display values are taken from the Z566M table column.

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1971 Nixie RFT

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

1971 NIXIE RFT

## Section 1 · Nixie

| CHARACTERISTIC           |                 |                       |
|--------------------------|-----------------|-----------------------|
| PARAMETER                | PUBLISHED VALUE | CONDITION / NOTE      |
| Anode Ignition Voltage   | <b>150 V</b>    | Comparable type Z566M |
| Anode Burning Voltage    | <b>140 V</b>    | Comparable type Z566M |
| Anode Extinction Voltage | <b>120 V</b>    | Comparable type Z566M |

| OTHER                       |                 |                       |
|-----------------------------|-----------------|-----------------------|
| PARAMETER                   | PUBLISHED VALUE | CONDITION / NOTE      |
| Minimum Operating Voltage   | <b>170 V</b>    | Comparable type Z566M |
| Minimum Cathode Current     | <b>3 mA</b>     | Comparable type Z566M |
| Maximum Cathode Current     | <b>6 mA</b>     | Comparable type Z566M |
| Peak Cathode Current        | <b>20 mA</b>    | Comparable type Z566M |
| Minimum Ambient Temperature | <b>-10 degC</b> | Comparable type Z566M |
| Maximum Ambient Temperature | <b>50 degC</b>  | Comparable type Z566M |
| Symbol Height               | <b>30 mm</b>    | Comparable type Z566M |
| Maximum Viewing Distance    | <b>18 m</b>     | Comparable type Z566M |
| Maximum Bulb Height         | <b>62 mm</b>    | Comparable type Z566M |
| Maximum Bulb Diameter       | <b>29.2 mm</b>  | Comparable type Z566M |

## TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,  
and their source documents.

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker