



ELECTRONIC TUBE REFERENCE

Z523M

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	9-12 TGL 11608	BASE PINS	—
NOMINAL HEATER	— / —	PARALLEL HEATER	— / —
HEATING	Indirect; cold cathode	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Nixie	
MAXIMUM PLATE VOLTAGE	170 V
MAXIMUM CATHODE CURRENT	5 mA
<i>Cold-cathode glow-display section; maximum cathode current promoted in amperes.</i>	

Z523M 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, 3-5 mA cathode current, and 15.5 mm side-viewed symbols. Page 5 identifies Z523M as comparable to Z870M; electrical/display values are taken from the Z870M 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	150 V	Comparable type Z870M
Anode Burning Voltage	140 V	Comparable type Z870M

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum Operating Voltage	170 V	Comparable type Z870M
Minimum Cathode Current	3 mA	Comparable type Z870M
Maximum Cathode Current	5 mA	Comparable type Z870M
Peak Cathode Current	7 mA	Comparable type Z870M
Minimum Ambient Temperature	-50 degC	Comparable type Z870M
Maximum Ambient Temperature	70 degC	Comparable type Z870M
Symbol Height	15.5 mm	Comparable type Z870M
Maximum Viewing Distance	10 m	Comparable type Z870M
Maximum Bulb Height	49.2 mm	Comparable type Z870M
Maximum Bulb Diameter	22.2 mm	Comparable type Z870M

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