ELECTRONIC TUBE REFERENCE

Z870M

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
NIXIE

RFT cold-cathode numerical/symbol indicator with 15.5 mm side-viewed characters. Manufacturer data specify approximately 150 V ignition, 140 V maintaining voltage, a 170 V minimum operating supply, and 3–5 mA cathode current for glow-discharge display service.

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

SECTION1 Nixie	
MAXIMUM PLATE VOLTAGE	170 V
MAXIMUM CATHODE CURRENT	5 mA
STARTING VOLTAGE	150 V
MAINTAINING VOLTAGE	140 V
Cold-cathode glow-display section; maximum cathode current promoted in amperes.	

Z870M 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. Z870M is tabulated directly in the supplied RFT display-tube data sheet.

SOURCE OPERATING CONDITIONS

1971 Nixie RFT

SOURCE PDF

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	Published RFT table
Anode Burning Voltage	140 V	Published RFT table

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

Tube Tinker

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