



ELECTRONIC TUBE REFERENCE

GA90

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

NIXIE

Cold-cathode numeric or symbol display tube documented through Japanese data and an RFT Z560M comparison. Available sources establish glow-discharge display operation and operating points at several anode supply voltages.

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

SECTION 1 Nixie	
MAXIMUM CATHODE CURRENT	2.5 mA
<i>Cold-cathode display section. The source table publishes operating-point and mechanical data rather than conventional vacuum-tube gm/rp/mu ratings.</i>	

GA90 is a cold-cathode Nixie numeric/symbol display tube. The supplied datasheet set identifies Z560M as a comparable RFT display type and provides ignition, burning and extinction voltages, cathode-current limits, environmental limits and mechanical/display data through that comparison.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1969 Nixie Zennippon Shinkukan

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

1969 NIXIE ZENNIPPON SHINKUKAN

Section 1 · Nixie

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Displayed symbols	0–9	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Connection diagram number	1	See source basing/connection diagram
Maximum overall length	41 mm	—
Maximum display diameter	29.5 mm	—
Maximum power consumption	0.4 W	—
Anode supply DC voltage	180 V	Operating point at 180 V
Average anode current	2 mA	AnodeSupplyVoltage=180V; approximate
Series resistor Rp	30 k0hm	AnodeSupplyVoltage=180V
Anode supply DC voltage	220 V	Operating point at 220 V
Average anode current	2 mA	AnodeSupplyVoltage=220V; approximate
Series resistor Rp	50 k0hm	AnodeSupplyVoltage=220V
Anode supply DC voltage	250 V	Operating point at 250 V
Average anode current	2 mA	AnodeSupplyVoltage=250V; approximate
Series resistor Rp	65 k0hm	AnodeSupplyVoltage=250V
Anode supply DC voltage	300 V	Operating point at 300 V
Average anode current	2 mA	AnodeSupplyVoltage=300V; approximate
Series resistor Rp	90 k0hm	AnodeSupplyVoltage=300V

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	145 V	Comparable RFT type Z560M
Anode Burning Voltage	135 V	Comparable RFT type Z560M
Anode Extinction Voltage	120 V	Comparable RFT type Z560M

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum Cathode Current	1 mA	Comparable RFT type Z560M
Maximum Cathode Current	2.5 mA	Comparable RFT type Z560M
Peak Cathode Current	10 mA	Comparable RFT type Z560M
Minimum Ambient Temperature	-50 degC	Comparable RFT type Z560M
Maximum Ambient Temperature	70 degC	Comparable RFT type Z560M
Symbol Height	15.5 mm	Comparable RFT type Z560M
Maximum Viewing Distance	10 m	Comparable RFT type Z560M
Maximum Bulb Height	26.5 mm	Comparable RFT type Z560M
Maximum Bulb Diameter	30.1 mm	Comparable RFT type Z560M

TUBE TINKER

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

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