



ELECTRONIC TUBE REFERENCE

ZM1250

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

NIXIE

Flat-pack gas-discharge 7×5 dot-matrix display capable of alphanumeric and symbolic presentation, with a separate left-hand decimal point. It supports both DC and dynamic drive and provides a bright, wide-angle electronic display.

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 PLATE VOLTAGE	220 V
MAXIMUM CATHODE CURRENT	3 mA
STARTING VOLTAGE	220 V
MAINTAINING VOLTAGE	140 V
<i>Published Mullard cold-cathode ratings and operating characteristics promoted where applicable; additional trigger/display values retained as parameters.</i>	

The ZM1250 is a flat-pack gas-discharge 7 x 5 dot-matrix display capable of alphanumeric and symbolic presentation, with a separate left-hand decimal point. It supports both DC and dynamic drive and provides a bright wide-angle display.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Mullard

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

1963 MULLARD

Section 1 · Nixie

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Matrix dimensions	7 x 5 dots	—
Character height	9.8 mm	—
Character width	6.8 mm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum supply voltage	220 V	—
Tube dissipation nominal	400 mW	—
Supply power per tube including sharing resistors	800 mW	—
Matrix cathode current peak minimum	1 mA	—
Matrix cathode current peak maximum	3 mA	—
Matrix cathode current average maximum over 10 ms	0.3 mA	—
Decimal-point cathode current peak minimum	3 mA	—
Decimal-point cathode current peak maximum	6 mA	—
Decimal-point cathode current average maximum over 10 ms	0.6 mA	—
Pulsed frequency minimum	800 Hz	DynamicDrive
Pulse width minimum	100 us	DynamicDrive
Envelope temperature maximum	70 C	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Envelope temperature minimum	-50 C	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ignition voltage minimum	220 V	—
Maintaining voltage minimum at 1.5 mA peak	120 V	—
Maintaining voltage nominal at 1.5 mA peak	140 V	—
Cathode extinction voltage	115 V	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Alphanumeric / symbolic dot-matrix display	—

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