

ELECTRONIC TUBE REFERENCE

ZM1186

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
NIXIE

Gas-filled cold-cathode front-view numerical display showing digits 0-9 with a left decimal point and 16 mm characters. Siemens data specify approximately 180 V ignition and 145 V normal glow voltage.

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

SECTION1 Nixie	
MINIMUM REGULATOR CURRENT	2 A
MAXIMUM REGULATOR CURRENT	3.5 A
STARTING VOLTAGE	180 V
MAINTAINING VOLTAGE	145 V
Single cold-cathode display section. Ignition, sustaining/extinction voltages, cathode-current limits, and display/mechanical data are retained below.	

The ZM1186 is a gas-filled cold-cathode Nixie display tube. The catalog shows 0 to 9 with left decimal point with a front viewing arrangement and a character height of 16.0 mm. Its ignition voltage is 180 V, extinction voltage is about 115 V, and normal glow voltage is about 145 V. The source is French-language material translated to English for this record.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1973 Nixie Siemens

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

1973 NIXIE SIEMENS

Section 1 · Nixie

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ignition voltage	180 V	Maximum/typical threshold shown in source table
Operating glow voltage	145 V	Approximate service voltage
Extinction voltage	115 V	Source table value
Nominal cathode current	2.75 mA	Main symbol/digit
Nominal decimal-point cathode current	0.4 mA	Decimal point

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum supply voltage	180 V	Absolute limit table
Cathode current	2–3.5 mA	Main symbol/digit continuous range
Decimal-point cathode current	0.2–0.6 mA	Decimal point continuous range
Maximum peak cathode current	4 mA	Main symbol/digit
Maximum peak decimal-point cathode current	0.7 mA	Decimal point
Envelope temperature minimum	-20 degC	Operating envelope temperature range
Envelope temperature maximum	70 degC	Operating envelope temperature range
Display characters	0 to 9 with left decimal point	Translated from French source
Display orientation	front	Viewing orientation
Character height	16 mm	Display geometry
Maximum tube height	24.5 mm	Mechanical dimension

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum tube width/diameter	20.5 x 27.5 mm	Mechanical dimension as printed

TUBE TINKER

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