



ELECTRONIC TUBE REFERENCE

Y1938

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
NIXIE

Low-voltage seven-segment vacuum fluorescent display using phosphor-coated segments excited by electrons from a directly heated cathode for bright alphanumeric readout.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	1.5 V / 42 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Nixie

No fixed ratings recorded.

Vacuum fluorescent/readout display represented as SectionType Other; published electrical/optical data preserved in parameters.

The Y-1938 is a low voltage seven bar segment vacuum cathodoluminescent readout tube which provides bright, sharp display of alphanumeric symbols at low drive and power levels. Symbols are displayed in type Y-1938 by excitation of phosphor-screened segments, which are energized by electrons emitted by a directly heated common cathode.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Nixie

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AnodeExcitationVoltageMaximum	55 V	—
AnodeExcitationVoltageTypical	25 V	—
MaximumTotalAnodePowerDissipation	100 mW	At 25 V
LOW POWER - Typical operation for high brightness is 25 volts for anode and 1.5 Vac or Vdc at	42 mA	LOW POWER - Typical operation for high brightness is 25 volts for anode and 1.5
Fllament Voltage o e e e e	1.5 V	TYPICAL SPECIFICATIONS
Filament CUMmeNt i i i e e	42 mA	TYPICAL SPECIFICATIONS
Filament Heating PoWer otth ittt et et e ettt e e e e	72 mW	TYPICAL SPECIFICATIONS
Anode Excitation Voltage (Max) o i e e e e b	5 V	TYPICAL SPECIFICATIONS
Anode Excitation Voltage Typical) iiiin i e e e e e	25 V	TYPICAL SPECIFICATIONS
Maximum Total Anode Power Dissipation at 25 Volts i e	100 mW	TYPICAL SPECIFICATIONS
Light Output (at	25 V	TYPICAL SPECIFICATIONS

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AnodeCurrentPerSegment	550 uA	At 25 V

TUBE TINKER

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

