

Dieter's Nixie Tube Data Archive

This file is a part of Dieter's Nixie- and display tubes data archive

If you have more datasheets, articles, books, pictures or other information about Nixie tubes or other display devices please let me know.

Thank you!

Document in this file	Archer datasheet for DT-1704 VFD tube
Display devices in this document	DT-1704, 276-063



SEVEN SEGMENT DIGITAL FLUORESCENT DISPLAY

TYPE DT-1704 — CATALOG #276-063

The Archer readout tube provides a bright, sharp display of numerals at low drive and power levels at a very fast speed. Numbers are displayed by excitation of phosphor-screened segments, which are energized by electrons emitted by a directly heated cathode.

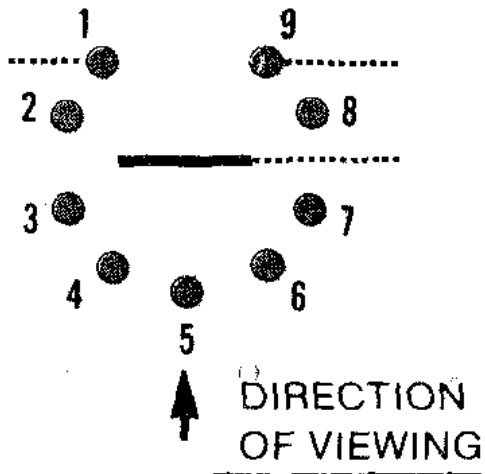
FEATURES

1. Driven by a BCD to seven segment Decoder/Driver #7447.
2. Total power requirements of less than 175 MW.
3. Fluorescent segments are mounted on a single substrate for extra durability in portable applications.
4. Highly visible blue-green color. Easy on the eye.
5. Typical light output of 150 foot lamberts at 27 volts D.C.
6. Maximum allowable segment voltage is 35 volts D.C.

	UNIT	SEG. V.	FIL. V.	MIN.	NOM.	MAX.
Filament current	MA. AC/DC	27	1.6	35	40	45
Cathode current	MA. D.C.	27	1.6	—	4.0	9.0
Segment current	MA. D.C.	27	1.6	—	0.5	1.5
Average brightness	Ft/lambert	27	1.6	100	150	—

DISPLAY ORIENTATION

(TOP VIEW)



(Plane of display is parallel to plane of pins 1 and 9.)

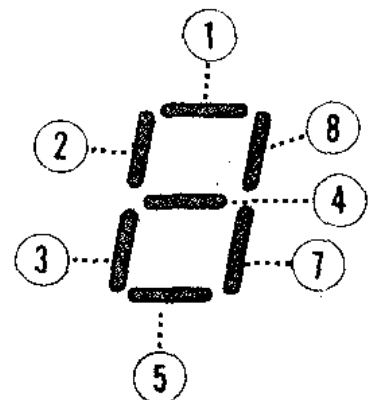
Seated height: $1\frac{3}{4}$ " nominal
 Diameter: .71 nominal
 Character size: .360" x .570" slanting to right 8°
 Brightness: 150 foot-lamberts gives excellent definition under high ambient light conditions. Brightness level can be varied with supply voltage.

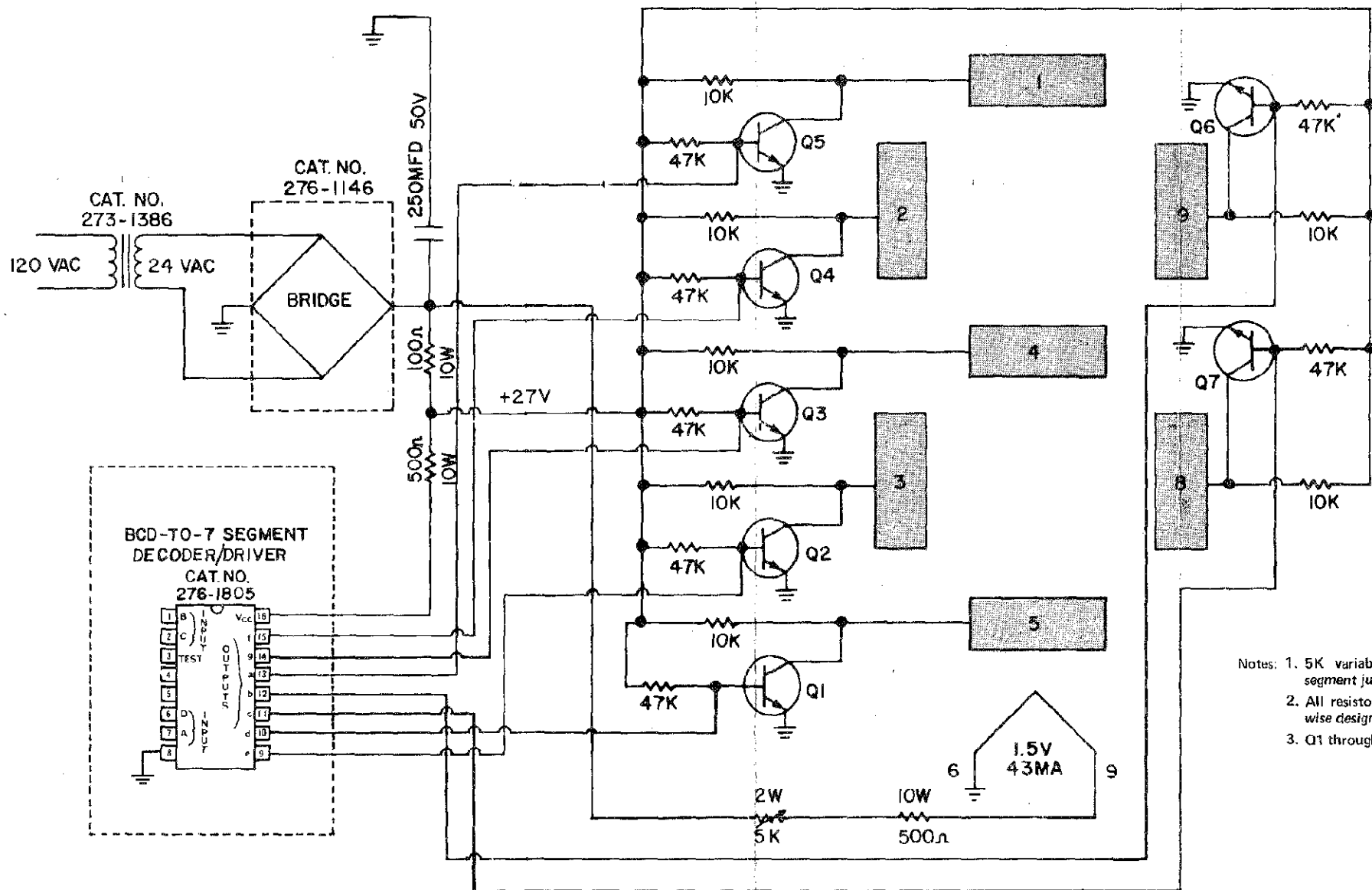
Basic display color: Green, changeable by filtering (see above).

Characters: Standard 7-segment alphanumeric. Forms numerals 0 through 9.

Typical operating conditions:
 $E = 1.6$ VAC or DC
 $I = 45$ ma @ $E = 1.6$ V
 $E = 25$ VDC

- | | | |
|------------|-------------|-------------|
| 1. Segment | 4. Segment | 7. Segment |
| 2. Segment | 5. Segment | 8. Segment |
| 3. Segment | 6. Filament | 9. Filament |





- Notes:
1. 5K variable resistor adjusts until segment just lights.
 2. All resistors 1/2 watt unless otherwise designated.
 3. Q1 through Q7 (Cat. No. 276-2016)