

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	ETL datasheet: GR10H tube
Display devices in this document	GR10H

***DIGITRON – 10 Digit End-Viewing
Cold-Cathode Numerical Register Tube**

GR10H

Limit Ratings

Maximum cathode current	2.5 mA
Minimum voltage to ensure breakdown	150 V

Characteristics

Nominal running voltage at 2 mA	140 V
Minimum pre-bias voltage (glowing cathode at 0 V)	+25 V
Maximum pre-bias voltage (glowing cathode at 0 V)	+100 V

A cathode left floating will assume some potential between that of the anode and the glowing cathode. Pre-biasing ensures that the non-glowing electrodes are clamped at a predetermined level and cathodes are selected bringing them to the 0 V line.

Recommended Operating Conditions

Under the recommended operating conditions, with the cathodes switched sequentially every 24 hours, an average life of 4000 hours can be expected.

D.C. operation

Anode supply voltage— $R_a = 82 \text{ k}\Omega$	250 V
$R_a = 47 \text{ k}\Omega$	200 V

A.C. operation

(Unsmoothed half-wave rectified 50 c.p.s. A.C.)

Anode supply voltage— $R_a = 120 \text{ k}$	220-250 V r.m.s.
$R_a = 82 \text{ k}$	200-220 V r.m.s.

*Registered Trade Mark



GR10H

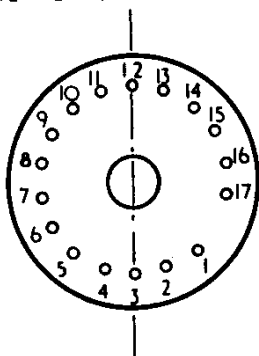
*DIGITRON—10 Digit End-Viewing Cold-Cathode Numerical Register Tube

Mechanical Data

Mounting position	Any
Base	B17A
Socket	B17A

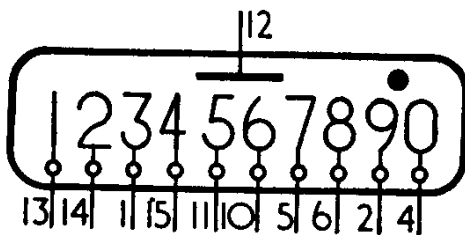
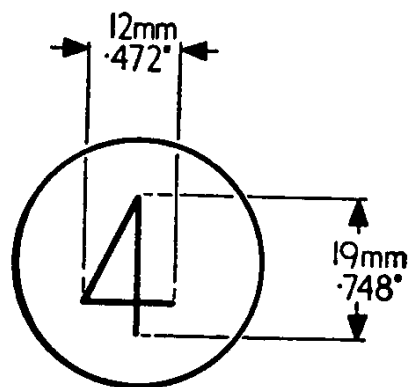
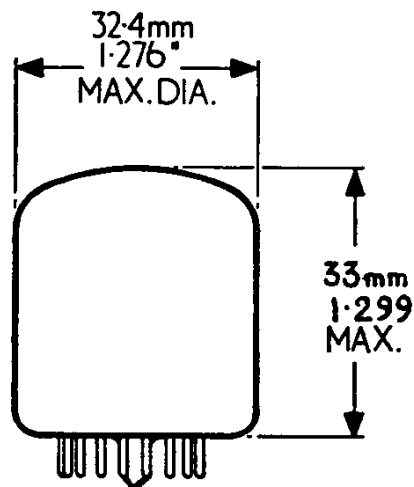
Base Connections
(underside view)

CENTRE LINE OF CHARACTERS



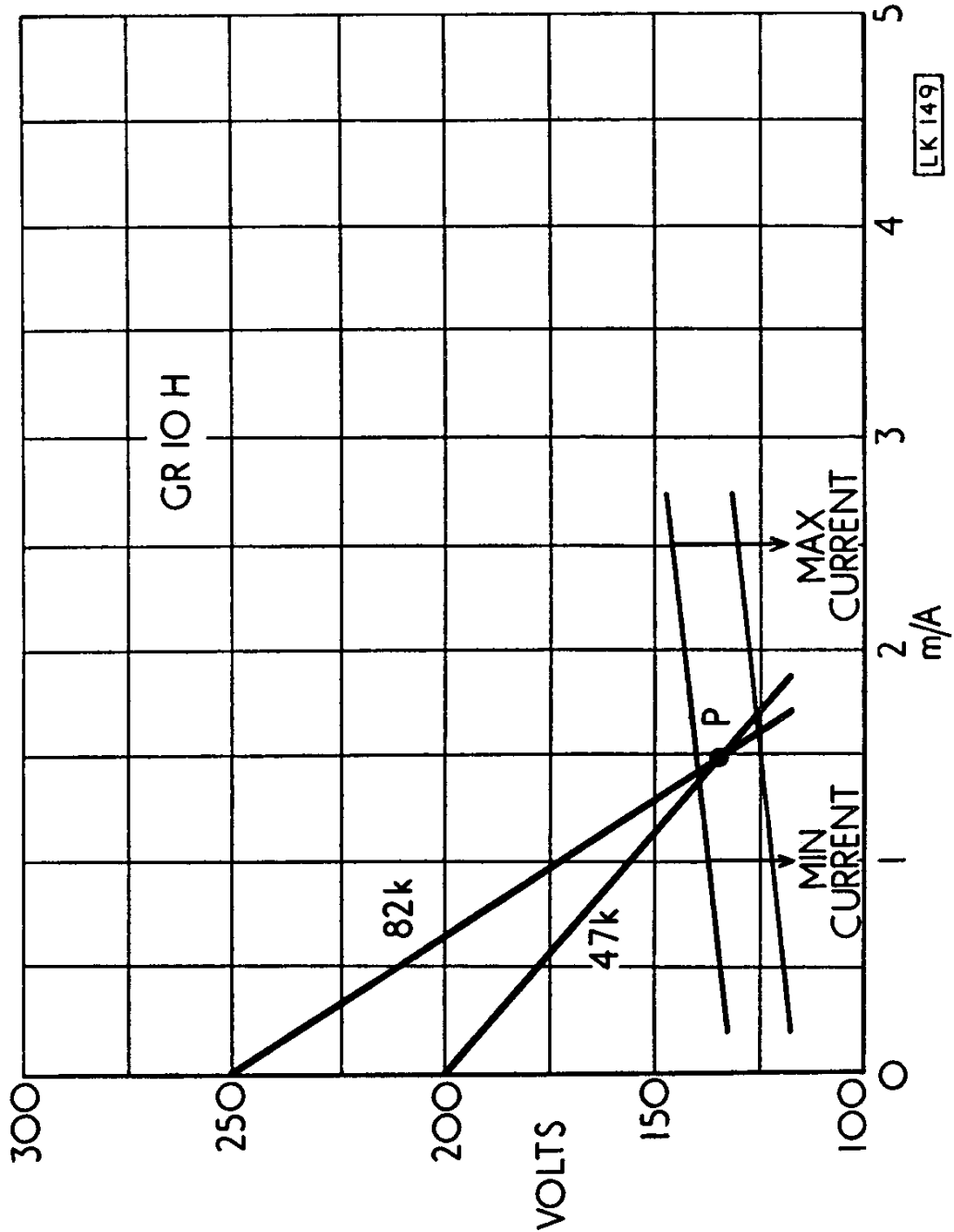
- Pin 1 Cathode 3
- 2 Cathode 9
- 4 Cathode 0
- 5 Cathode 7
- 6 Cathode 8
- 10 Cathode 6
- 11 Cathode 5
- 12 Anode
- 13 Cathode 1
- 14 Cathode 2
- 15 Cathode 4

Note: All other pins are to be left unconnected.



*DIGITRON – 10 Digit End-Viewing Cold-Cathode Numerical Register Tube

GR10H



Operating Characteristics

*Registered Trade Mark

