

# 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: GC10B, GC10B/S, CV2271 tubes
Display devices in this document	GC10B, GC10B/S, CV2271

**Limit Ratings**

Maximum counting rate : sine wave and rectangular pulses	4,000 p.p.s.
Maximum total anode current	550 $\mu$ A
Minimum total anode current	250 $\mu$ A
Minimum anode supply voltage (normal room illumination)	350 V
Maximum potential difference between guides and cathodes	140 V
Maximum output cathode load	150 k $\Omega$
Maximum output pulse available with 150 k $\Omega$ cathode load resistor	35 V

**Characteristics**

Running voltage at 300 $\mu$ A (GC10B/S)	191 $\pm$ 5 V
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**Recommended Operating Conditions**

*Anode current	310 $\mu$ A $\pm$ 20%
**Guide Bias	+18 V
Bias on output cathode resistor	-20 V
Forced resetting pulse	-120 V
Double pulse drive-amplitude	-80 V $\pm$ 10 V
Double pulse drive-durations	60 $\mu$ S
Integrated pulse drive-amplitude	-145 V $\pm$ 15 V
Integrated pulse drive-duration	80 $\mu$ S
Sine wave drive-amplitude	40—70 V r.m.s.

\* The required anode current may be obtained from a 475 V supply via an 820 k $\Omega$  resistor.

\*\* This does not apply in the case of the sine-wave drive.

### Mechanical Data

Mounting position

Any

For visual indication the tube is viewed through the dome of the bulb.

Alignment

Cathode "O" is aligned with pin 6 to an accuracy of  $\pm 12^\circ$ .

Weight

43 g (nominal)

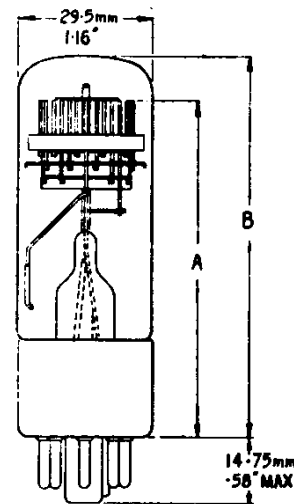
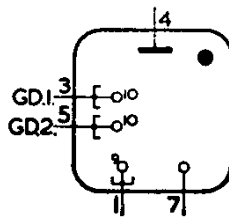
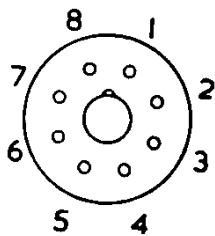
Escutcheons

N.78211 Bakelite, or  
N.79368 Brass

Base

I.O.

Base Connections  
(underside view)



- Pin 1 Common cathodes
- 2 —
- 3 1st Guides
- 4 Anode
- 5 2nd Guides
- 6 —
- 7 Cathode "O"
- 8 —

Dimension	Nominal	GC10B		GC10B/S	
		Min.	Max.	Min.	Max.
A	72.5 mm. (2.85")	68.5 mm.	76.5 mm.	69.5 mm.	75.5 mm.
B	85 mm. (3.35")	81.5 mm.	88.5 mm.	82.5 mm.	87.5 mm.