

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: GC12/4B tube
Display devices in this document	GC12/4B

Bi-directional 12-way Computing Tube with Intermediate Outputs

GC 12/4 B

Limit Ratings

Maximum counting rate: sine wave and rectangular pulses	4,000 p.p.s.
Maximum total anode current	550 μ A
Minimum total anode current	250 μ 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 Ω

Characteristics

Running voltage at 300 μ A	191 V approx.
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Recommended Operating Conditions

*Anode current		310 μ A \pm 20%
**Guide bias	+20 V	+ 40 V
Bias on output cathode resistor	-20 V	Zero
Resultant pulse	40 V	40 V
Forced resetting pulse		-120 V
Double pulse drive-amplitude		-80 V \pm 10 V
Double pulse drive-durations		60 μ S
Integrated pulse drive-amplitude		-145 V \pm 15 V
Integrated pulse drive-duration		80 μ 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 Ω resistor.

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

The following table shows the number of input pulses for which outputs may be obtained for both directions of drive and with each cathode used as the zero electrode.

Number of pulses to give output from :—

A	B	C	D	
0	1	7	9	Clockwise, A zero
0	11	5	3	Anti-clockwise, A zero
11	0	6	8	Clockwise, B zero
1	0	6	4	Anti-clockwise, B zero
5	6	0	2	Clockwise, C zero
7	6	0	10	Anti-clockwise, C zero
3	4	10	0	Clockwise, D zero
9	8	2	0	Anti-clockwise, D zero

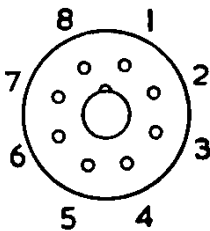
GC12/4B

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Mechanical Data

Mounting position	Any. For visual indication the tube is viewed through the dome of the bulb.
Alignment	Cathode " B " is aligned with pin No. 6 to an accuracy of $\pm 10^\circ$.
Weight	43 g (nominal).
Escutcheon	N79369 Brass
Base	I.O.

Base Connections (underside view)



- Pin 1 Common cathodes
 Pin 2 Cathode " C "
 Pin 3 1st Guides
 Pin 4 Anode
 Pin 5 2nd Guides
 Pin 6 Cathode " A "
 Pin 7 Cathode " B "
 Pin 8 Cathode " D "

