Dieter’s

Nixie Tube Data Archive

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

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File created by Dieter Waechter
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scale-of-ten counter tube for single pulse operation

GC10D

Characteristics

Counting rate	0—20 kp/S.

Limit Ratings

Maximum total anode current	1·2 mA
Minimum total anode current	700 μA
Minimum supply voltage, anode to cathode (normal room illumination)	420 V
Maximum potential difference between guides and cathodes	180 V

The output cathode must not rise above the potential of the commoned cathodes, and may be made more than 18 V negative only when re-setting.

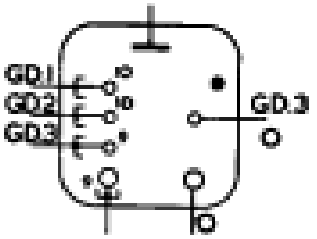
Recommended Operating Conditions

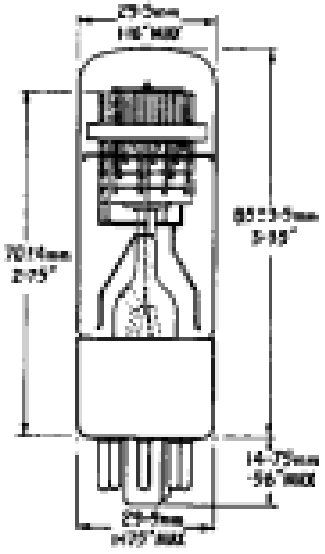
Anode current	800 μA
Running voltage at this current	215 V
Forced setting voltage	140 V
Output cathode load, R_o	82 kΩ

The required anode current may be obtained from a +475 V supply via a 330 kΩ resistor, R_a.

Note : To reduce the effect of stray capacity to a minimum it is essential that the anode resistor must be wired not more than ¼" (6·4 mm.) from tag 4 on the valve holder.

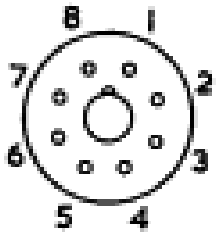
Mounting Position	Any. For visual indication, the tube is viewed through the dome of the bulb.
Alignment	Cathode "0" is lined up with pin No. 6 to an accuracy of ± 12°.
Weight	44 g. (nominal).
Escutcheons	N.78211 Bakelite or N.79368 Brass.





Base Connections
(underside view)

Pin	1	Common cathodes
	2	3rd Guides
	3	1st Guides
	4	Anode
	5	—
	6	Output Cathode
	7	Output 3rd Guide
	8	2nd Guides



Base : International octal

Component Values in Counter Drive Circuits shown at the end of the Handbook

Random Pulse Drive. (Fig. 7)

Negative pulse amplitude 144 ± 12 V

Pulse duration Minimum 25 μS
Maximum is limited by repetition rate

Quiescent time Minimum 25 μS
Maximum is limited by repetition rate

R_4	56 kΩ (5%)	C_4	·02 μF
R_6	10 kΩ (5%)	D_1	CV.469 or Q3/3
E_6	+ 72 ± 12 V		
R_9	1 MΩ		

Sine Wave Drive. (Fig. 7)

Input volts 50—80 V r.m.s.

C_4 is chosen in conjunction with R_{12} to pass the lowest frequency required.

R_4	2·7 MΩ	D_1	not required
R_6	68 kΩ		
E_6	+12 ± 2 V		
R_9	0		