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: GR12G and GR12H tube	
Display devices in	GR12G, GR12H	
this document		

File created by Dieter Waechter www.tube-tester.com

MAINTENANCE TYPE ONLY

* DIGITRONS -12 Character Side-Viewing Cold-Cathode Letter Tubes

GR 12 G GR 12 H

GR12G Tube contains the letters A to L inclusive

GR12H Tube contains the letters L to X excluding P and Q but additionally including E.

Limit Ratings

Maximum cathode current: -

Letter	I	5 mA
Letters	L and T	5.5 mA
Letters	J and F	7.5 mA
Remainin	ng letters	9.0 mA

Minimum voltage necessary to ensure breakdown 220V

Characteristics

Nominal running voltage: -

Letter I at 4.5 mA	170V
Letters L and T at 5.0 mA	175V
Letters J and F at 6.25 mA	185V
Remaining letters at 7.5 mA	175V

A cathode left floating will assume some potential between that of the anode and the glowing cathode.

It should be noted that non-glowing cathodes must not be returned to a bias rail, but should be left disconnected.

Recommended Operating Conditions

D.C. operation	
Anode Supply Voltage - Ra = 10 K Ω	250V

A.C. operation

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

Anode Supply Voltage - Ra = $12K\Omega$ 200-220V r.m.s. Ra = $18k\Omega$ 220-250V r.m.s.

Cathode equalizing resistors (Va = 250V only).

Letter I 8.2k Ω Letters L and T 4.7k Ω

^{*} Registered Trade Mark



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GR 12 G GR 12 H

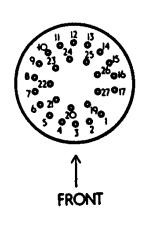
G12G

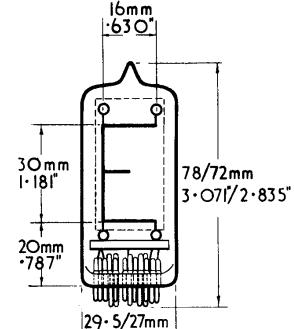
DIGITRONS -12 Character Side-Viewing Cold-Cathode Letter Tubes

Mechanical Data



Base Connections (Underside view)



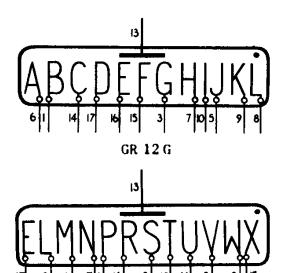


DIA DIA

012 0		GGIZH				
Pin 1	Cathode	В	Pin 1	Cathode	P	
3	#	G	3	11	S	
5	Ħ	J	5	#	V	
6	Ħ	A	6	#	M	
7	77	H	7	Ħ	N	
8	**	L	8	₩	W	
9	11	K	9	**	L	
10	#	1	10	Ħ	T	
13	Anode		13	Anode		
14	Cathode	C	14	Cathode	U	
15	**	F	15	**	X	
16	#	E	16	#	R	

GR 12H

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Note: Pins 2,4,11 and 12 must be left unconnected.

D



E

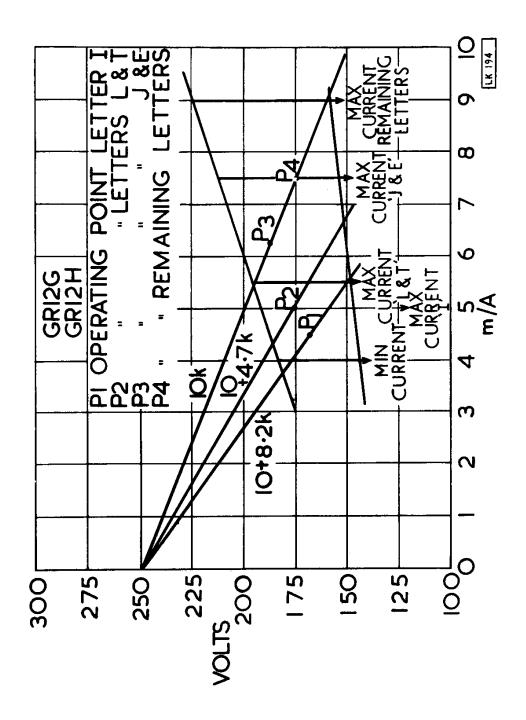
GR 12 H

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GR 12 G GR 12 H



Operating Characteristics

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