

Bi-directional 10-way Selector Dekatron with Routing Guides

GS10H

Although the seated height of this tube is less than $1\frac{1}{2}$ " , the electrical characteristics are similar to the Dekatrons with phenolic bases.

Limit Ratings

Maximum counting rate	5000 p.p.s.
Maximum anode current	370 μ A
Minimum anode current	250 μ A
Minimum supply voltage (normal room illumination)	380 V
Maximum potential difference between electrodes other than anode	140 V
Maximum cathode output voltage	28 V

Characteristics

Running voltage at 310 μ A	187 V nominal
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Recommended Operating Conditions for a maximum counting rate of 4000 p.p.s.*

**Cathode resistors	82 K Ω
***Anode resistor	820 K Ω
Supply voltage, with 1% anode resistor	475 V \pm 10%
with 5% anode resistor	475 V \pm 5%
Guide Bias	+ 35 V
Forced resetting pulse	- 120 V
Double Pulse Circuit, Fig. 2	
Pulse amplitudes	- 70 \pm 7 V
Pulse durations	80 \pm 5 μ S
Integrated Pulse Circuit, Fig. 1	
Input pulse amplitude	- 145 \pm 15 V
Input pulse duration	75 μ S min. 1/3f secs max.
Continuous Sine Wave Circuit, Fig. 3	
Amplitude	55 \pm 15 V r.m.s.

* The manufacturers will design circuits to suit individual cases where the counting rate exceeds 4 kps.

** Each cathode must have a return path to the negative rail via 82 K Ω , even though an output pulse is not required.

*** To reduce the effect of stray capacity to a minimum, it is essential that the anode resistor be wired not more than $\frac{1}{4}$ " (5 mm) from the anode tag on the valve holder.



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Mechanical Data

Mounting position

Any

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

Alignment

Cathode 1 is aligned with pin 9 $\pm 3^\circ$.

Base

B17A

Escutcheon

N79368

Valveholder, printed circuit

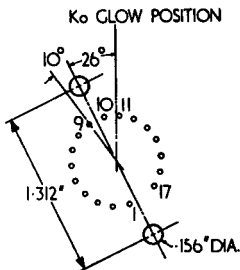
E.T.L. code HFD 13534

Valveholders, tags

A.E.I. type VH26/1703

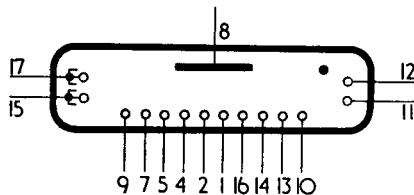
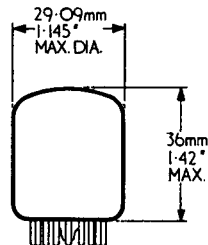
E.T.L. code HFD 13045

Valveholder connections and fixing (under-chassis view).



Valveholder requires 1.0" dia. hole in chassis.

Pin 1 Cathode 6
 2 Cathode 5
 3 Do not connect
 4 Cathode 4
 5 Cathode 3
 6 Do not connect
 7 Cathode 2
 8 Anode
 9 Cathode 1



Pin 10 Cathode 0
 11 Routing Guide 2
 12 Routing Guide 1
 13 Cathode 9
 14 Cathode 8
 15 Commoned Guide 2
 16 Cathode 7
 17 Commoned Guide 1

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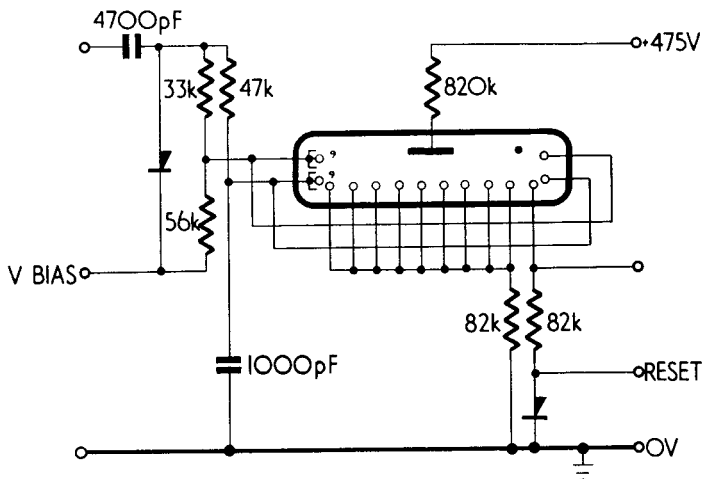


Fig. 1 Integrated Pulse Drive

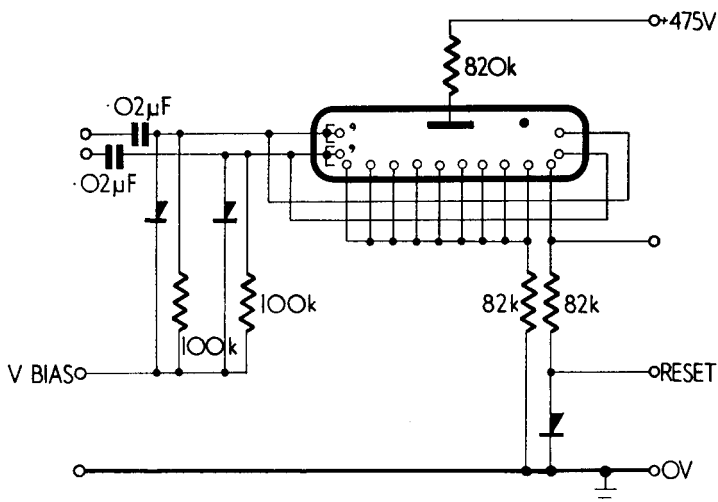
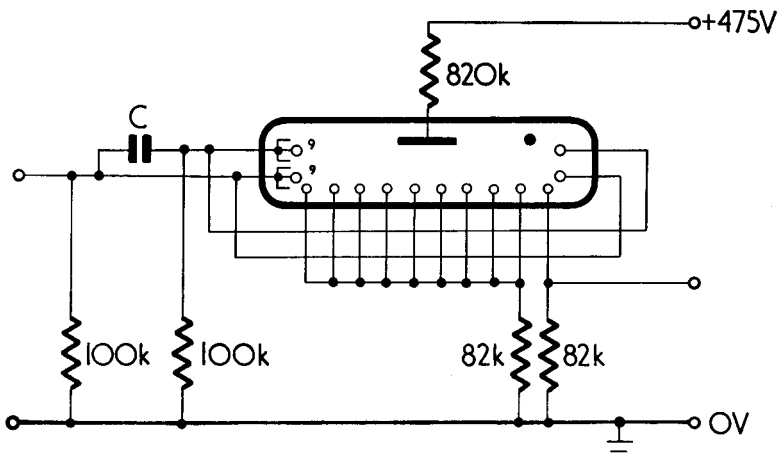


Fig. 2 Double Pulse Drive

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f	4 kc/s	2 kc/s	1 kc/s	500 c/s	200 c/s	100 c/s	50 c/s
C	680 pF	·002 μ F	·005 μ F	·01 μ F	·02 μ F	·05 μ F	·1 μ F

Fig. 3 Sine Wave Drive

All diodes type 0A202 or equivalent.

Components and Voltages 10% tol. unless specified in data.