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 μA
Minimum anode current	250 μA
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 μA	187 V nominal

Recommended Operating Conditions for a maximum counting rate of 4000 p.p.s.*

**Cathode resistors	82 KΩ
***Anode resistor	820 KΩ
Supply voltage, with 1% anode resistor	475 V ± 10%
with 5% anode resistor	475 V ± 5%
Guide Bias	+ 35 V
Forced resetting pulse	— 120 V
Double Pulse Circuit, Fig. 2	
Pulse amplitudes	— 70 ± 7 V
Pulse durations	80 ± 5 μS
Integrated Pulse Circuit, Fig. 1	
Input pulse amplitude	— 145 ± 15 V
Input pulse duration	75 μS min.
	1/3f secs max.
Continuous Sine Wave Circuit, Fig. 3	
Amplitude	55 ± 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 KΩ, 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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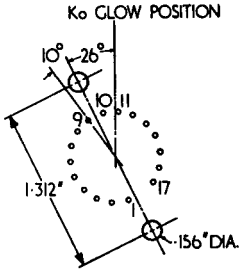
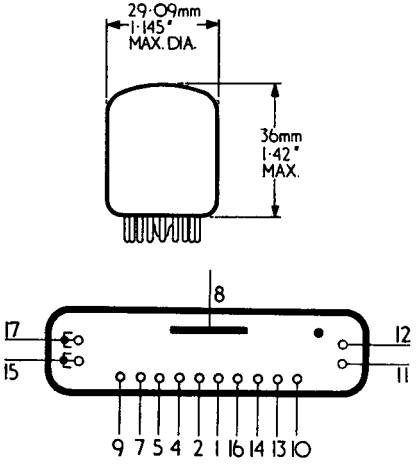
Mechanical Data

Mounting position	Any For visual indication the tube is viewed through the dome of the bulb.
Alignment	Cathode 1 is aligned with pin 9 ± 3°.
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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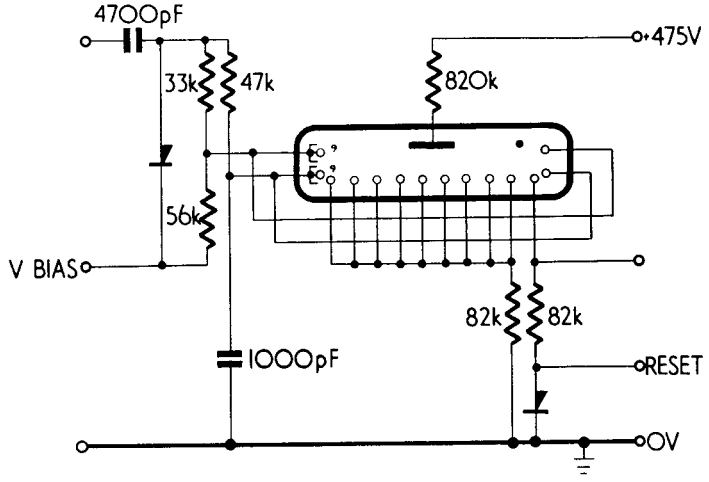

Fig. 1 Integrated Pulse Drive

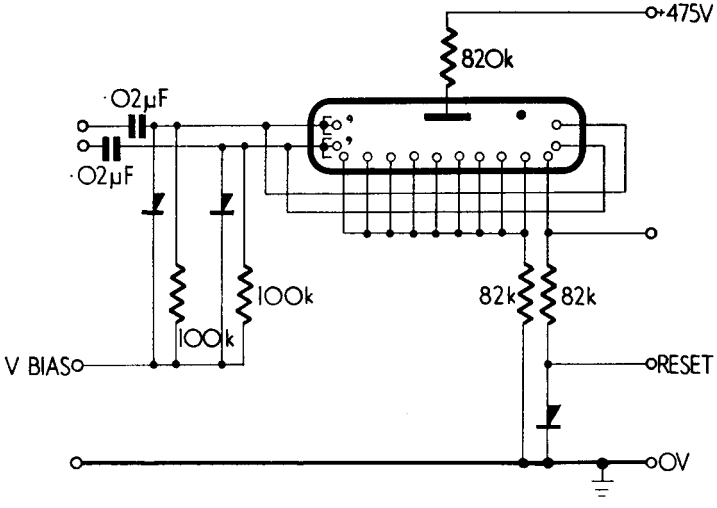

Fig. 2 Double Pulse Drive

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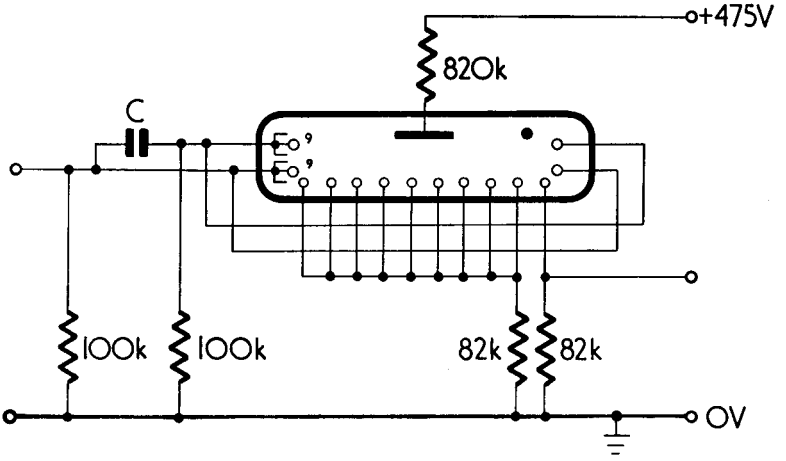

f	4 kc/s	2 kc/s	1 kc/s	500 c/s	200 c/s	100 c/s	50 c/s
C	680 pF	·002μF	·005μF	·01μF	·02μF	·05μF	·1μF

Fig. 3 Sine Wave Drive

All diodes type 0A202 or equivalent.
Components and Voltages 10% tol. unless specified in data.