

Bi-directional 10-way Selector Tube

GS10D

Limit Ratings

Maximum counting rate:	
Continuous sine wave drive	20 kp/s
Rectangular pulse drive	10 kp/s
Maximum total anode current	900 μ A
Minimum total anode current	700 μ A
Minimum supply voltage, anode to cathode (normal room illumination)	440 V
Maximum potential between guides and cathodes	180 V
Maximum output pulse available with 47k cathode load resistor	35 V

Characteristics

Running voltage at 800 μ A 208 V approx.

Recommended Operating Conditions

*Anode current	800 μ A	
**Guide bias	+50 \pm 5 V	
Cathode load resistors	47 k Ω max.	←
Forced resetting pulse	-140 V	
***Double pulse drive—amplitude	-120 V \pm 10 V	
Double pulse drive—duration	30 μ S \pm 20%	
Double pulse drive—pulse overlap at the 90% pulse level	10 \pm 5 μ S	←
****Integrated pulse drive—amplitude	-145 V \pm 15 V	
Integrated pulse drive—duration	33 μ S \pm 20%	←
Sine wave drive—amplitude	60—100 V r.m.s.	←

* The required anode current may be obtained from a 475 V supply via a 300 k Ω \pm 5% resistor.

Note—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.

** This does not apply in the case of the sine wave drive. See circuit LK.100, Issue 2.

*** The pulses should have a rise time of less than 150 V/ μ S and a droop of less than 30 V. See circuit LK.102, Issue 2.

**** The pulse should have a rate of rise of less than 150 V/ μ S and a droop of less than 5 V. See circuit LK.101, Issue 2.

N.B. ← Indicates a change from previous data sheet.



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Selector Tube

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 No. 11 to an accuracy of $\pm 12^\circ$.

Weight

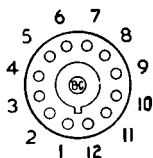
53 g (nominal)

Base

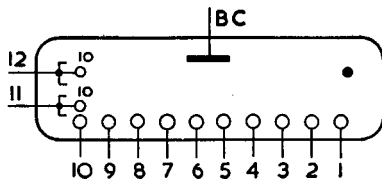
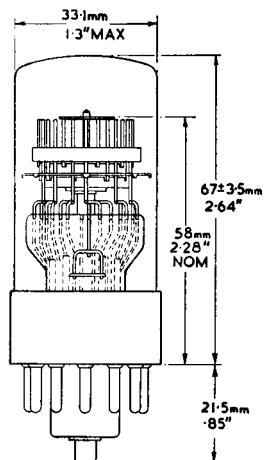
Duodecal with bottom cap.

Escutcheon

N80977.

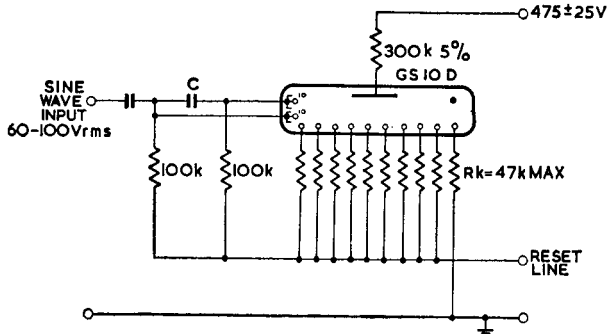
Base Connections
(underside view)

Pin 1	Cathode 0
2	" 9
3	" 8
4	" 7
5	" 6
6	" 5
7	" 4
8	" 3
9	" 2
10	" 1
11	2nd Guides
12	1st Guides
B.C. Anode	



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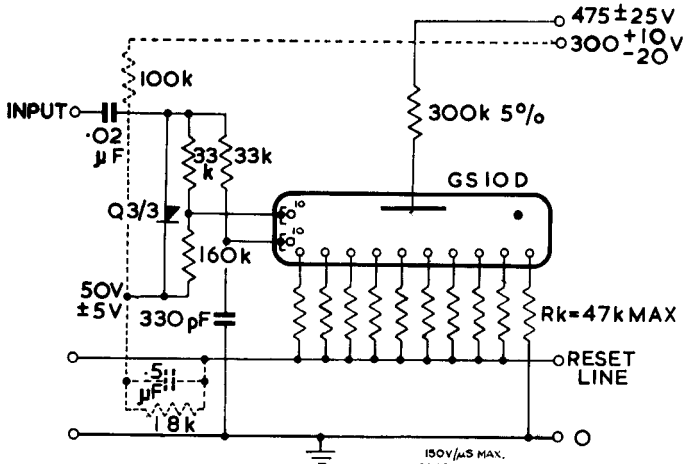
GS10D



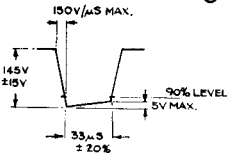
FREQUENCY	20 kc/s	15 kc/s	10 kc/s	5 kc/s	2 kc/s	1 kc/s	500 c/s	200 c/s	100 c/s	50 c/s
C	270 pF	330 pF	470 pF	680 pF	0.002 μF	0.005 μF	0.01 μF	0.02 μF	0.05 μF	0.1 μF

LK100
ISSUE 2

Continuous Sine-Wave Drive



INPUT PULSE
10kpps MAX.



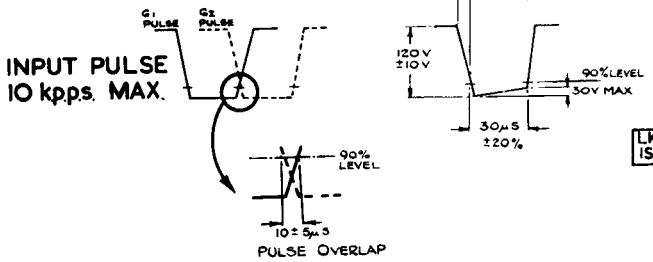
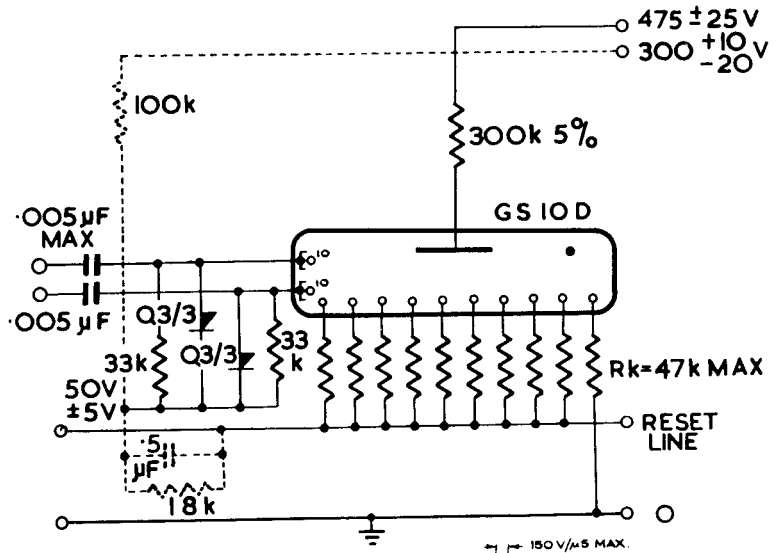
LK101
ISSUE 2

Integrated-Pulse Drive



GS10D

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Paired-Pulse Drive

