

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.
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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 ± 10 V	
Double pulse drive—duration	30 μ S $\pm 20\%$	
Double pulse drive—pulse overlap at the 90% pulse level	10 ± 5 μ S	←
****Integrated pulse drive—amplitude	—145 V ± 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 $\Omega \pm 5\%$ 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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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)

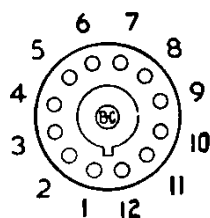
Base

Duodecal with bottom cap.

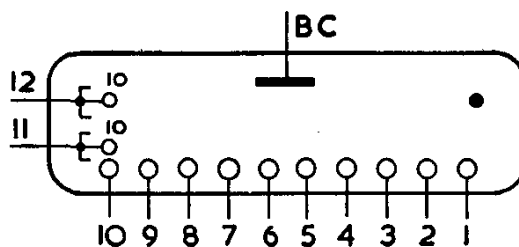
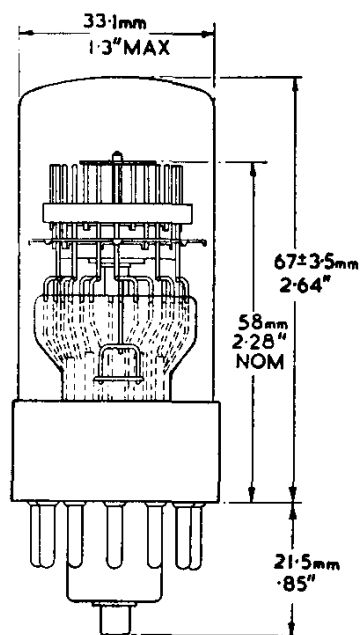
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N80977.

Base Connections
(underside view)

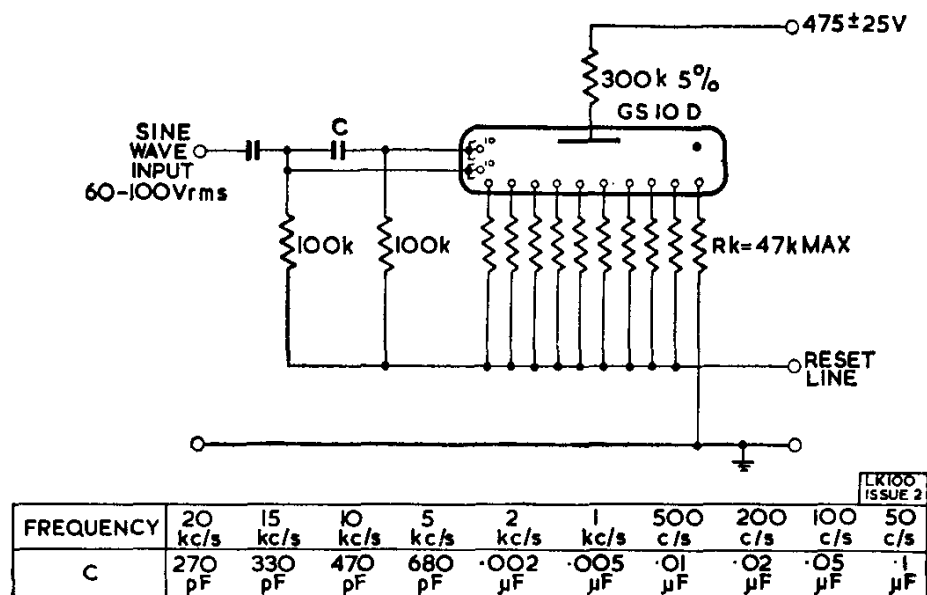


Pin 1	Cathode 0
2	" 9
3	" 8
4	" 7
5	" 6
6	" 5
7	" 4
8	" 3
9	" 2
10	" 1
11	2nd Guides
12	1st Guides
B.C.	Anode

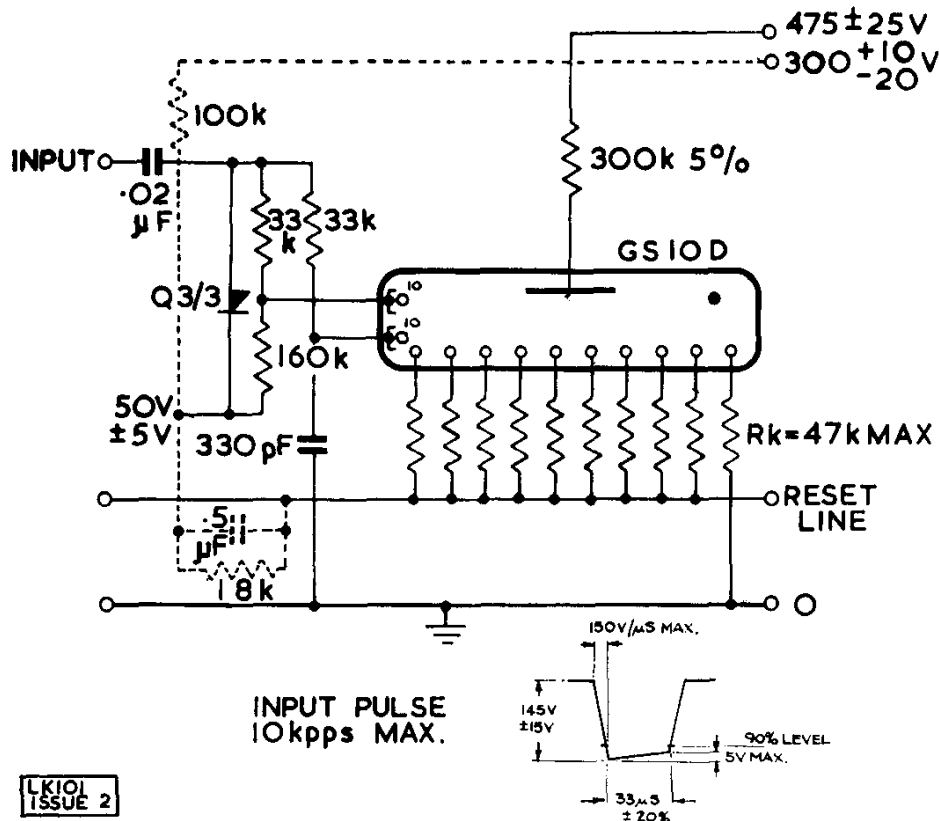


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GS10 D



Continuous Sine-Wave Drive

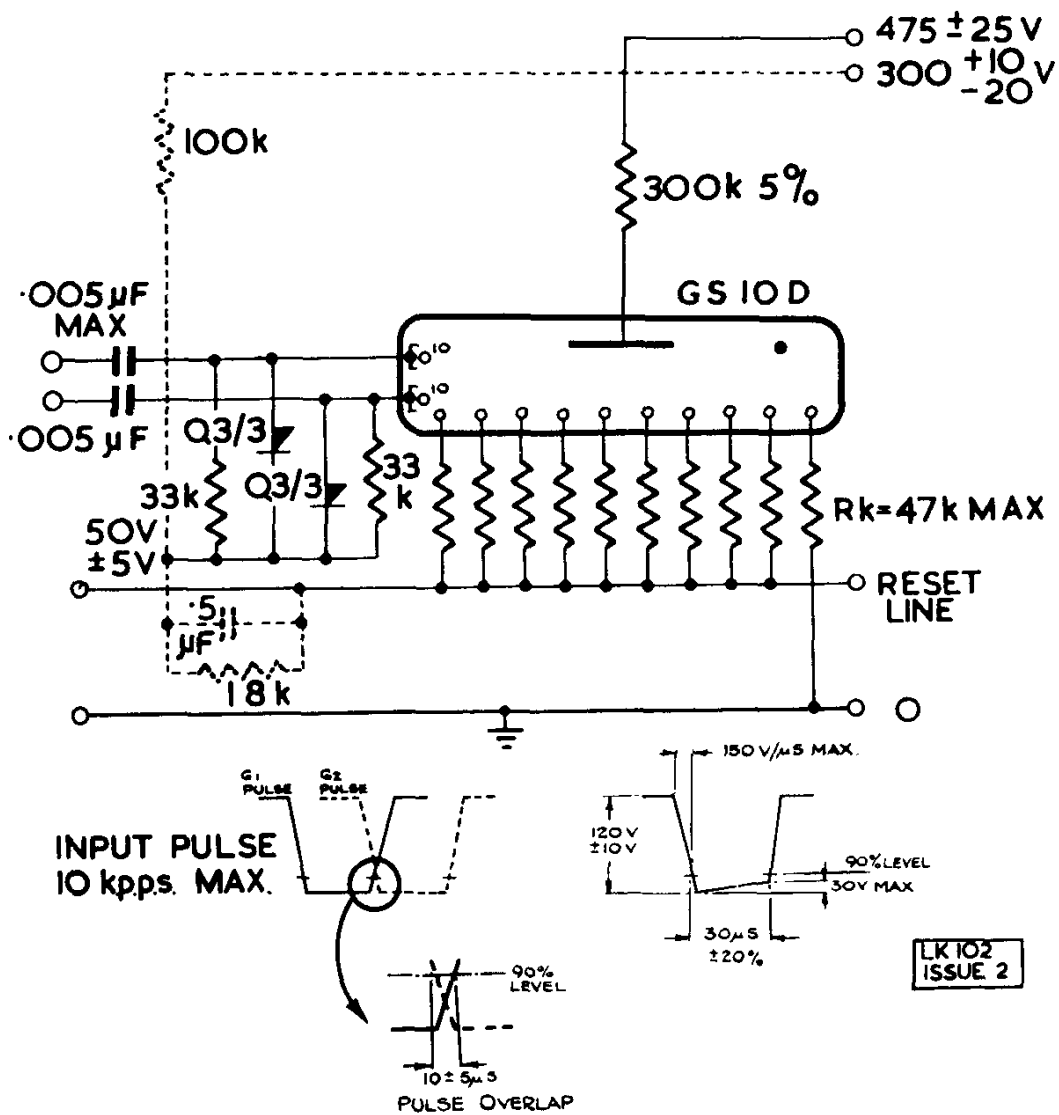


Integrated-Pulse Drive



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Paired-Pulse Drive

