

DATA FOR E.I.A. REGISTRATION

MULLARD LIMITED,  
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L O N D O N W.C.1.  
ENGLAND.

THREE ELECTRODE THYRATRON XR1-1600A JEDEC TYPE 8063

The XR1-1600A is a three electrode, inert gas-filled thyatron with a negative control characteristic. This tube is designed primarily for power control.

MAXIMUM RATINGS

	<u>General Control Service</u>	<u>Ignitor Firing Service</u>	
Maximum Peak Anode Voltage			
Inverse	1500	1500	volts
Forward	1500	1500	volts
Maximum Cathode Current			
Peak (25c/s and above)	20	30	amperes
Average	1.6	0.5	amperes
Maximum Averaging Time	15	15	seconds
Maximum Negative Control Grid Voltage			
Before Conduction	250	250	volts
During Conduction	10	10	volts
Maximum Positive Control Grid Current (during the time that the Anode Voltage is more positive than -10V)			
Peak	1.25	1.25	amperes
Average (Averaging Time One Cycle)	0.10	0.10	ampere
Maximum Positive Control Grid Current (during the time that the Anode Voltage is more negative than -10V)			
Peak	5.0	5.0	milliamperes
Maximum Grid Resistor	100,000	100,000	ohms
Maximum Commutation Factor	10	10	
Maximum Ambient Temperature	+70	+70	°C

GENERAL

	<u>min.</u>	<u>bogey</u>	<u>max.</u>	<u>min.</u>	<u>bogey</u>	<u>max.</u>	
Electrical Data							
Filament Voltage	2.37	2.5	2.63	2.61	2.75	2.89	volts
Filament Current		8.5	9.5	9.2	10.3		amperes
Cathode Heating Time	10						seconds
Anode to Control Grid Capacitance				0.35			µf
Control Grid to Cathode Capacitance				10.0			µf
Deionisation Time							
Grid Voltage=-250volts				200	approx.		µseconds
Grid Voltage=-100volts				300	approx.		µseconds
Ionisation Time				10	approx.		µseconds
Anode Voltage Drop				10	approx.		volts
Critical Control Grid Current (at Anode Voltage=1500 volts)				<20			µamperes

Note: When two or more tubes are operated from a common filament transformer, the transformer center taps must be used for the cathode return, and may also be connected to the filament center taps.

**Mechanical Data**

Mounting Position

Any between horizontal and vertical with base down.

\*Cooling

Convection

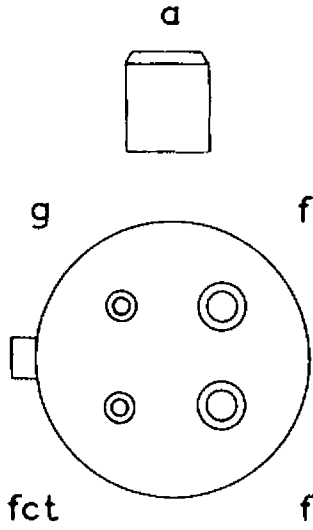
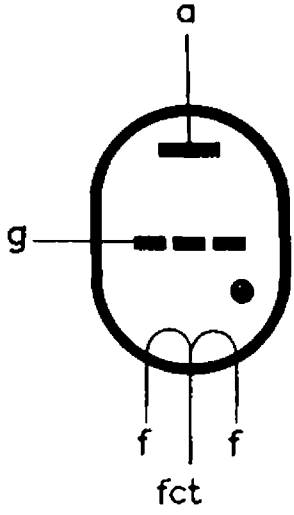
Maximum Net Weight

4.1 ounces

\*The anode structure must be left free, to ensure adequate cooling by free convection.

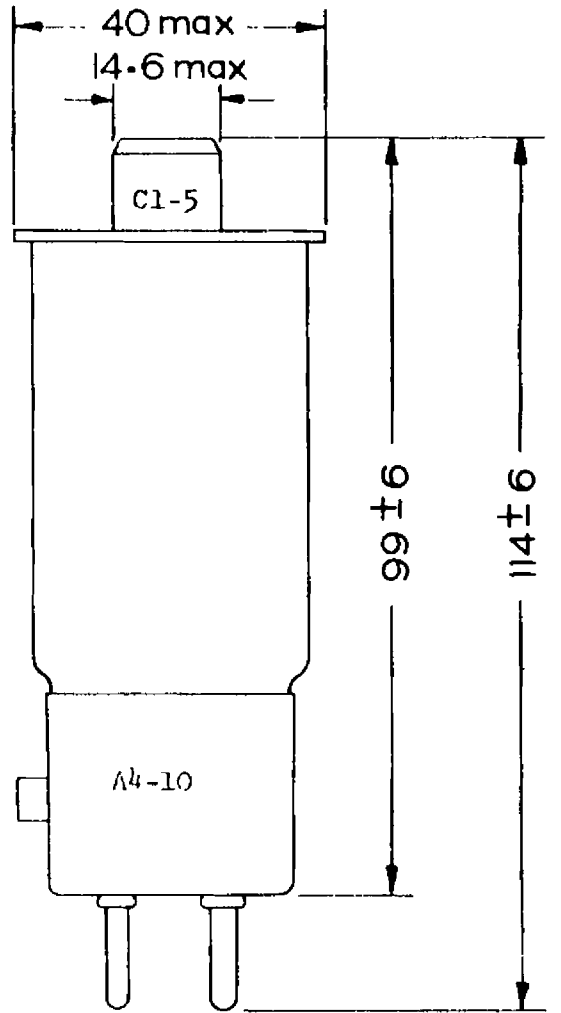
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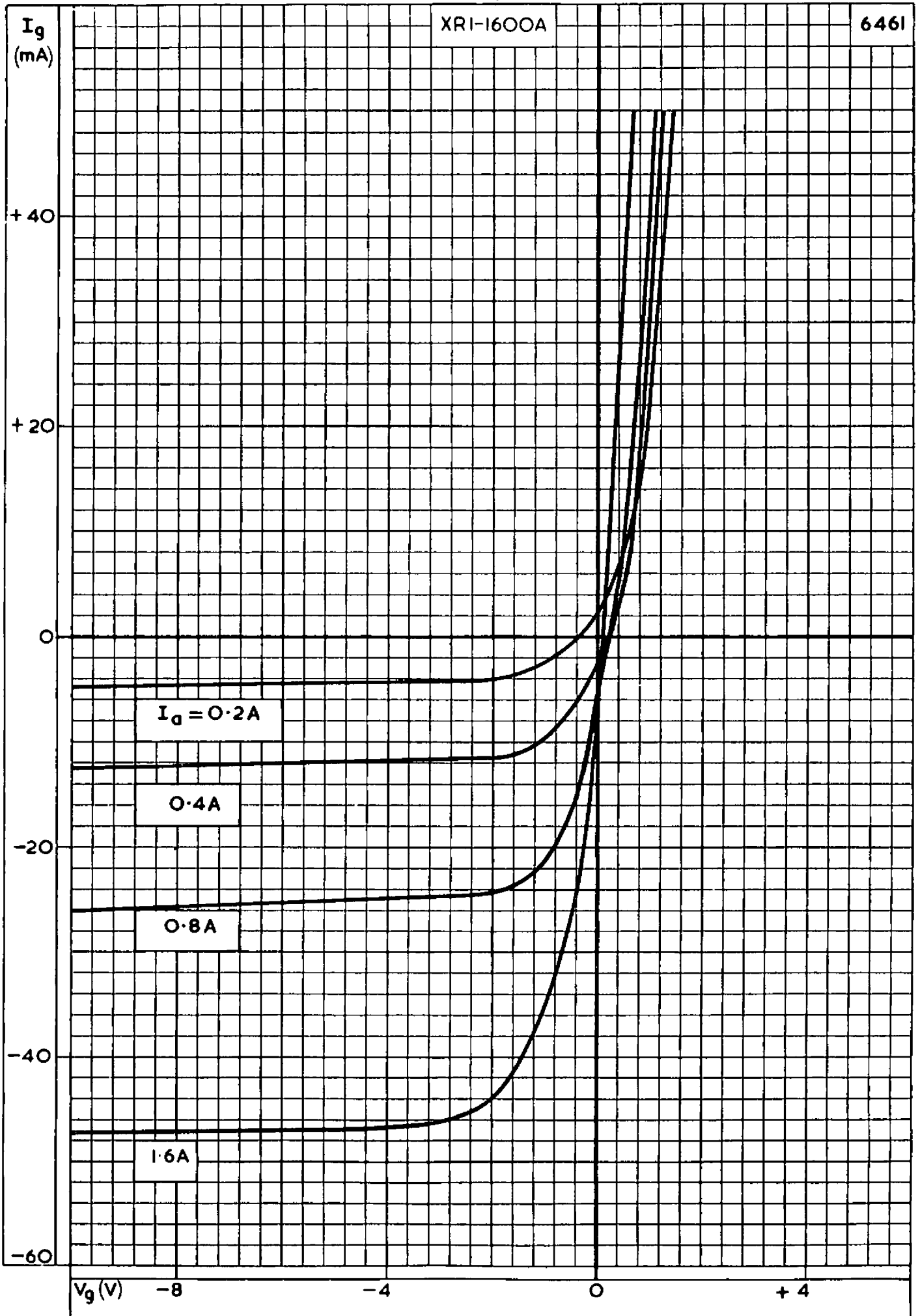
JEDEC TYPE 8063



Medium 4-pin base  
with bayonet catch

All dimensions in mm





6456

XRI-1600A

$V_a$   
(kV)

1.6

1.2

0.8

0.4

0

$V_g$  (V)

-15

-10

-5

0

