from JEDEC release #3255, May 1, 1961

DATA FOR E.I.A. REGISTRATION

MULLARD LIMITED,
Mullard House,
Torrington Place,
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 thyratron with a negative control characteristic. This tube is designed primarily for power control.

MAXIMUM RATINGS

	General Control Service	Ignitor Firing Service	
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

	min.	bogey	max.	min.	bogey	max.	
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		μμf
Control Grid to Cathode Capacitance					10.0		μμf
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.

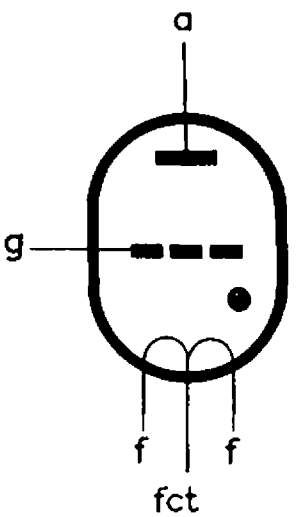
Mechanical Data

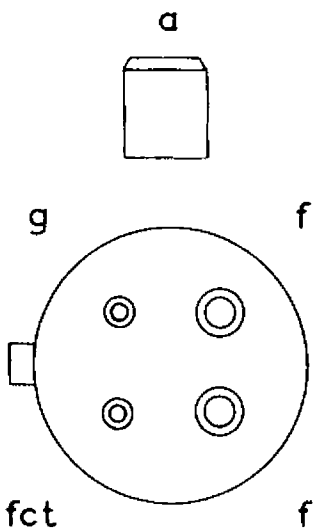
Mounting Position	Any between horizontal and vertical with base down.
*Cooling	Convection
Maximum Net Weight	4.1 ounces

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

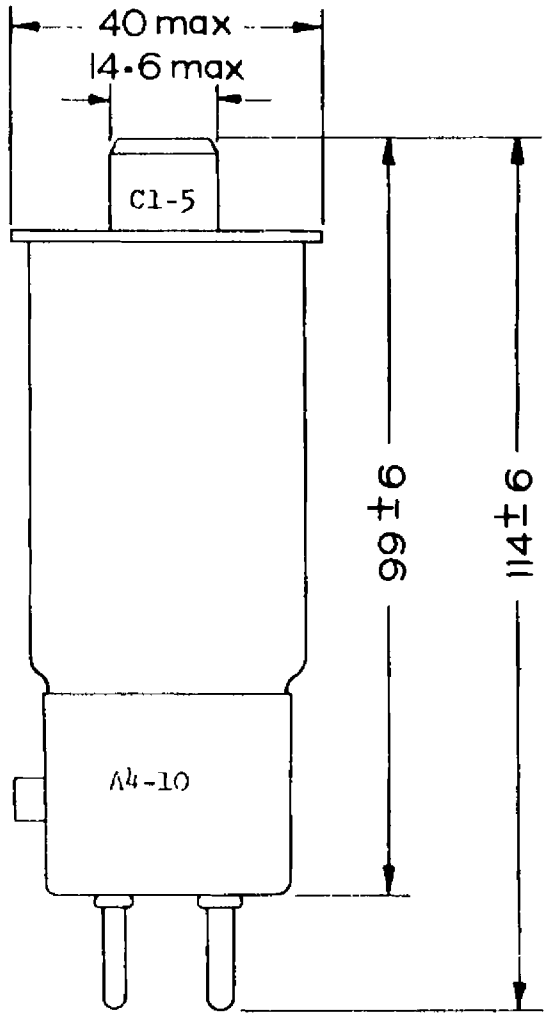
6215

JEDEC TYPE 8063

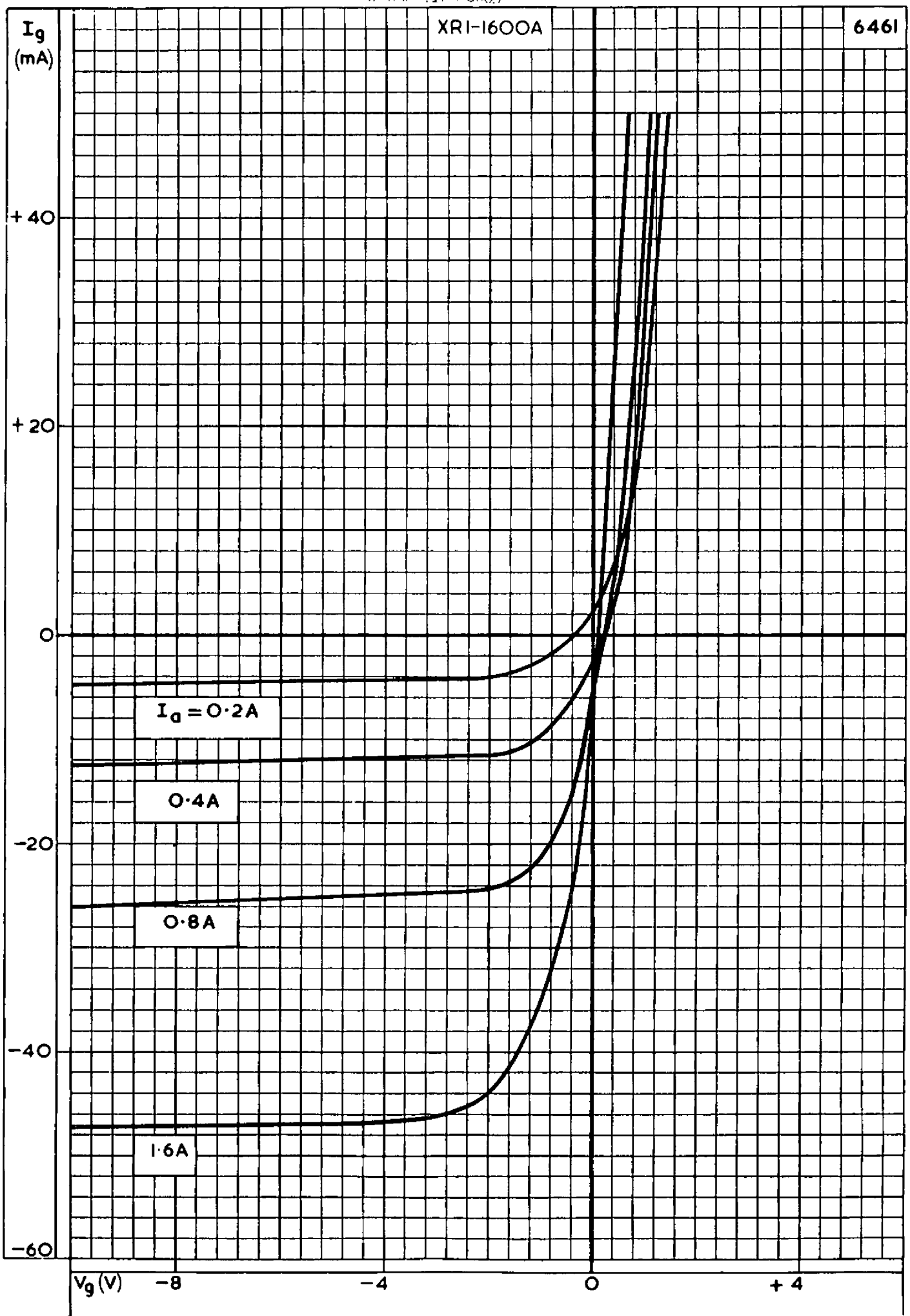


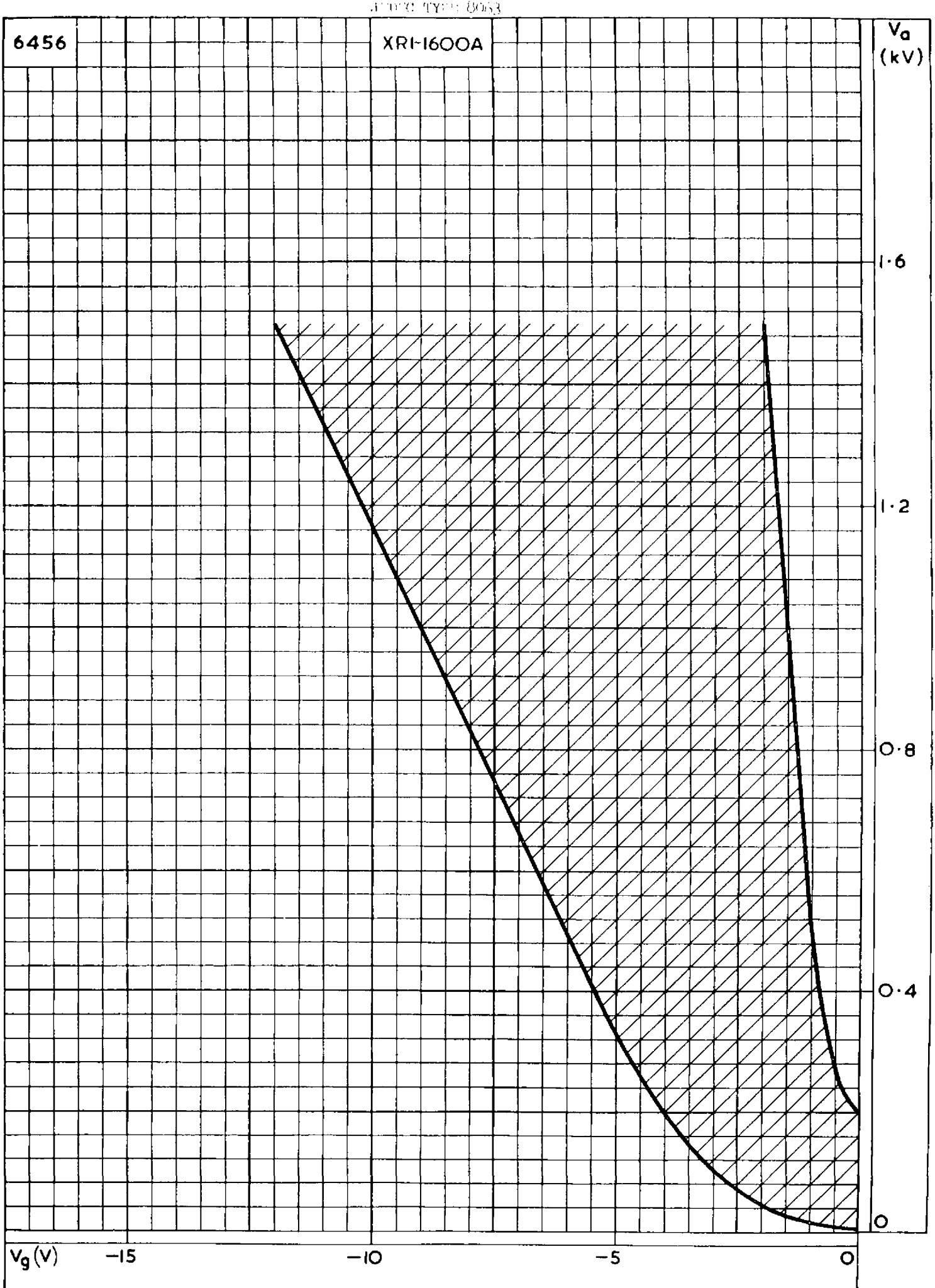


Medium 4-pin base
with bayonet catch



All dimensions in mm


XR1-1600A
6461
I_g (mA)
+40
+20
0
−20
−40
−60
I_a = 0·2A
0·4A
0·8A
1·6A
V_g (V)
−8
−4
0
+4


6456
XR1-1600A
V_a (kV)
1·6
1·2
0·8
0·4
0
V_g (V)
−15
−10
−5
0