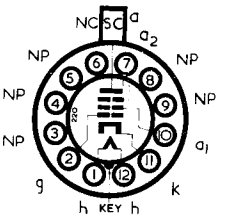
Replacement Type

TYPE **C21NM**
B12A (DUODECAL) BASE



The BRIMAR C21NM is a rectangular 70° deflection angle Teletube with magnetic focus, a pentode gun incorporating an ion trap, aluminized screen and external conductive coating. The screen colour is white, with a grey glass faceplate with a transmission of approximately 67 per cent.

RATINGS

Heater Voltage	6.3 volts
Heater Current	0.3 amps.
Final Anode Voltage (V_{a3})	18 kilovolts max.
Final Anode Voltage (V_{a3})	12 kilovolts min.
First Anode Voltage (V_{a1})	500 volts max.
First Anode Voltage (V_{a1})	200 volts min.
Pre-focus Anode Voltage (V_{a2})	500 volts max.
Pre-focus Anode Voltage (V_{a2})	—100 volts min.
Grid Voltage (Vg)	0 volts max.
Grid Voltage (Vg)	—150 volts min.
Grid Voltage, Postive Peak	2 volts max.
Heater to Cathode Voltage (V_{h-k}) Cathode Positive	180 volts max.
Heater to Cathode Voltage (V_{h-k}) Cathode Positive *	410 volts max.
Heater to Cathode Voltage (V_{h-k}) Cathode Negative	125 volts max.
Grid Circuit Resistance	1.5 megohms max.
Heater to Cathode Circuit Impedance	10 kilohms max.

* *During warm-up, for a period not exceeding 15 seconds.*

OPERATING CHARACTERISTICS

Final Anode Voltage	16 kilovolts
First Anode Voltage	400 volts
Pre-focus Anode Voltage	400 volts
Grid Voltage to cut off Beam Current	—53 to —105 volts
Field Strength of Ion-Trap Magnet	60 gauss approx.

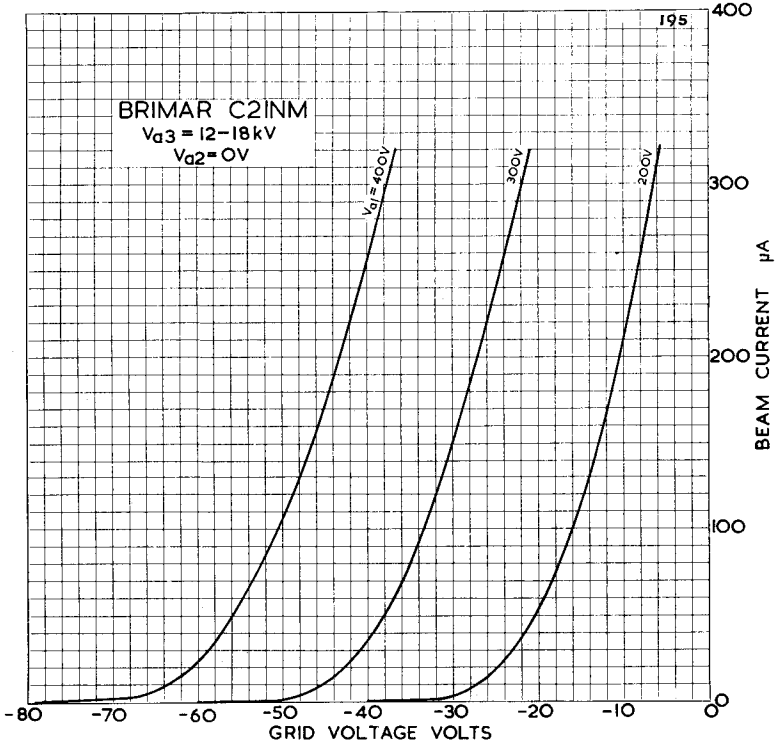
INTER-ELECTRODE CAPACITANCES

Grid to all	7 pF approx.
Cathode to all	7 pF approx.
Final Anode to External Coating	750-2,000 pF

NOTES:

A. No harmful X-ray radiation is produced by this tube when operated at final anode voltages below 16 kV. At voltages above 16 kV some shielding may be necessary to protect against prolonged exposure at close range.
(Outline drawing as for C21HM or C21TM.)

B. The ion-trap magnet should be adjusted to give the brightest picture. Failure to do this may shorten the life of the tube.


195
BRIMAR C2INM
Va3 = 12-18kV
Va2 = 0V
Va1 = 400V
300V
200V
400
300
200
100
0
BEAM CURRENT μA
-80
-70
-60
-50
-40
-30
-20
-10
0
GRID VOLTAGE VOLTS