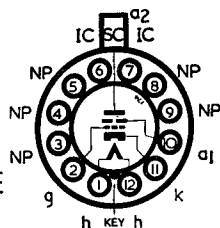


C12FM

Replacement Type

TYPE C12FM

B12A (DUODECAL) BASE



MAGNETIC TELETYPE WITH TETRODE GUN, ION TRAP AND EXTERNAL CONDUCTIVE COATING

RATINGS

*Heater Voltage	6.3 volts
Heater Current	0.3 amp.
Final Anode Voltage (V_{a2})	9 kV max.
First Anode Voltage (V_{a1})	350 volts max.
Beam Current	175 μ A max.
Peak Heater to Cathode Potential	150 volts max.
†Peak Heater to Cathode Potential	250 volts max.

OPERATING CHARACTERISTICS

Final Anode Voltage	7 kV
First Anode Voltage	200 volts
Grid Voltage (V_{g1}) for Cut-off	-40 volts
Peak to Peak Modulation for Maximum Beam Current	25 volts
Focusing Coil requirements with $\frac{1}{4}$ inch Gap	600 amp. turns approx.
Distance from Modulator Grid Aperture to Centre of Focus Coil Gap	2 inches approx.
Scanning Power for Coil of Mean Length $1\frac{3}{4}$ inches	4 amp. turns per cm. approx.

INTER-ELECTRODE CAPACITANCES

Grid to All (C_{g-all})	7.0 pF
Cathode to All (C_{k-all})	5.0 pF
Anode to External Coating (C_{a-M})	2,000 pF

* Under series operated conditions the maximum heater voltage must not exceed 7.5 volts RMS. This may be ensured by the use of a suitable Brimistor to reduce the switching surge.

† Heater Negative with respect to Cathode and only during warm-up period of 15 secs. maximum duration.

ADJUSTMENT OF ION-TRAP MAGNET

(A suitable magnet is the IT6 from Messrs. Elac Ltd.)

The magnet should be located on the neck with the arrow pointing towards the screen and along the line marked on the neck. With an unmodulated raster the magnet should be slid up the neck to give the brightest picture. It may be necessary to re-adjust the focus during this operation and after doing so the magnet setting should again be adjusted for optimum brightness. It is important to set the ion-trap magnet correctly, as incorrect positioning may lead to premature failure of the tube.

DIMENSIONS

Overall Length	460 mm. \pm 5 mm.
Overall Diameter	370 mm. \pm 1, -7 mm.
Neck Diameter	33 mm. to 35.5 mm.