

Current Equipment Type

TYPE C14HM/1
B12A (DUODECAL)
BASE

The C14HM/1 is a wide angle Teletube with a tetrode gun, ion trap, aluminized screen, and external conductive coating, for use in television picture monitors and similar applications. This tube is manufactured to a strict specification and is capable of providing high-grade pictures for television monitoring and industrial purposes.

RATINGS

Heater Voltage	...	...	...	...	...	6.3 volts
Heater Current	...	...	...	...	...	0.6 amps.
Final Anode Voltage (V_{a2})	...	...	...	...	...	14 kilovolts max.
Final Anode Voltage (V_{a2})	...	...	...	...	...	12 kilovolts min.
First Anode Voltage (V_{a1})	...	...	...	...	...	410 volts max.
First Anode Voltage (V_{a1})	...	...	...	...	...	250 volts min.
Beam Current	...	...	...	...	...	250 μ A max.
Grid Voltage (V_g)	...	...	...	...	...	-2 volts max.
Peak Heater—Cathode Voltage (V_{hk})	...	...	...	...	...	180 volts max.
Peak Heater—Cathode Voltage (V_{hk})†	...	...	...	...	...	410 volts max.
Diagonal Deflection Angle	...	...	...	...	...	70° approx.

† Heater negative with respect to cathode and only during a warm-up period not exceeding 15 seconds.

OPERATING CHARACTERISTICS

Final Anode Voltage	...	...	...	...	...	14 kilovolts
First Anode Voltage	...	...	...	...	...	300 volts
Peak to Peak Modulation for beam current of 150 μ A	...	...	...	...	...	30 volts
Grid Voltage Limits for Spot Cut-off	...	...	...	...	...	-55 to -77 volts
Field strength of Ion-Trap Magnet	...	...	...	...	...	45 gauss approx.

INTER-ELECTRODE CAPACITANCES

Grid to all	...	...	...	...	...	9.0 pF max.
Cathode to all	...	...	...	...	...	6.0 pF max.
Final Anode to external coating	...	...	...	...	...	1,500 pF max.

NOTES:

1. The ion-trap magnet should be adjusted to give the brightest picture. Failure to do this may shorten the life of the tube.
2. The spot shape depends to some extent upon the ion-trap magnet. A suitable type is the integral moulded ring type, which is magnetised at opposite ends of a diameter and gives a more uniform field than types using a single magnet with pole pieces.