

7C5-LT

BEAM POWER AMPLIFIER

```
(TENTATIVE DATA)
                                                                                               0.45
HEATER VOLTAGE (A.C. or D.C.) HEATER CURRENT
                                                                                                                  volts
                                                                                                      3-3/8"
MAXIMUM OVERALL LENGTH
MAXIMUM SEATED HEIGHT
MAXIMUM DIAMETER
                                                                                                     2-27/32"
                                                                                                       1-1/4
BULB
                                                                                                         T-9
                                                                    Small Wafer Octalox 8-Pin with Sleeve
BASE
BASING DESIGNATION
Nominal value is 7 volts.
Nominal value is 0.48 ampere.
                                      Single-Tube Amplifier - Class A
                                                                                                 315 max. *Volts
250 max. *Volts
12 max. *Watts
2 max. *Watts
PLATE VOLTAGE
SCREEN VOLTAGE
PLATE DISSIPATION
SCREEN DISSIPATION
TYPICAL OPERATION: Heater Voltage #
                                                             6.3
                                                                                                 6.3
                                                                                                                 Volts
                                                                               6.3
    Plate Voltage
                                                                               250
                                                             180
                                                                                                 315
                                                                                                                 Volts
    Screen Voltage
                                                             180
                                                                               250
                                                                                                 225
                                                                                                                 volts
   Grid Voltage ##
Peak A-F Grid Voltage
Zero-Signal Plate Current
Max.-Signal Plate Current
                                                             -8.5
                                                                                                 -13
                                                                                                                 Volts
                                                                            -12.5
                                                                                                   13
                                                             8.5
                                                                             12.5
                                                                                                                 Volts
                                                               29
                                                                                 45
                                                                                                                 Milliamperes
                                                               30
                                                                                 47
                                                                                                   35
                                                                                                                 Milliamperes
    Zero-Signal Screen Current
Max.-Signal Screen Current
                                                                               4.5
                                                                                                 2.2
                                                                                                                 Milliamperes
                                                                 3
                                                                                                    6
                                                                                                                 Milliamperes
    Plate Resistance
                                                          58000
                                                                            52000
                                                                                             77000
                                                                                                                 Ohms
    Transconductance
                                                            3700
                                                                                               3750
                                                                                                                 Micromhos
                                                                             4100
                                                            5500
                                                                                                                 0 hms
    Load Resistance
                                                                                               8500
                                                                             5000
                                                                                                                 Per Cent
Watts
   Total Harmonic Distortion Max.-Signal Power Output
                                                                 8
                                                                                                  12
                                                                                                 5.5
                                       Push-Pull Amplifier - Class AB,
                                                                                                 315 max. *Volts
250 max. *Volts
12 max. *Watts
2 max. *Watts
PLATE VOLTAGE
SCREEN VOLTAGE
PLATE DISSIPATION
SCREEN DISSIPATION
TYPICAL OPERATION:
                                                Values are for 2 tubes
                                                                                                 6.3
250
   Heater Voltage #
                                                                                                                 Volts
   Plate Voltage
Screen Voltage
                                                                                                                 Volts
                                                                                                 250
                                                                                                                 Volts
   Grid Voltage ##
Peak A-F Grid-to-Grid Voltage
                                                                                                                 Volts
                                                                                                 -15
                                                                                                  30
70
                                                                                                                 Volts
   Zero-Signal Plate Current
Max.-Signal Plate Current
                                                                                                                 Milliamperes
                                                                                                   79
                                                                                                                 Milliamperes
   Zero-Signal Screen Current
Max.-Signal Screen Current
Effective Load Resistance (Plate to plate)
                                                                                                    5
                                                                                                                 Milliamperes
                                                                                                   13
                                                                                                                 Milliamperes
                                                                                             10000
                                                                                                                 Ohms
                                                                                                                 Per Cent
Watts
   Total Harmonic Distortion
                                                                                                    5
   Max.-Signal Power Output
 Design maximum for 117-volt line.
pesign maximum for 117-volt line.

In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

If the type of input coupling used should not introduce too much resistance in the grid circuit. Transformer— or impedance—input coupling devices are recommended. When the grid circuit has a resistance not higher than 0.05 megohm, fixed bias may be used; for higher values, cathode bias is required. With cathode bias, the grid circuit may have
    a resistance not to exceed 0.5 megohm.
                                                                                 Pin Connections
      Operating Position
                                                        Pin 1 - Heater
                                                                                                 Pin 6 - Grid
                    An v
                                                       Pin 2 — Plate
Pin 3 — Screen
Pin 4 — No Connection
                                                                                                 Pin 7 - Cathode
Pin 8 - Heater
```

March 8, 1940

(Pin numbers are according to RMA system)

Plug - No Connection

Pin 5 - No Connection