Beam Power Tube

GENERAL DATA

Electrical:
Heater Characteristics and Ratings (Design-Maximum Values):
Voltage (AC or DC) ........................................ 6.3 ± 0.6 volts
Current at heater volts = 6.3 .................................. 0.450 amp
Peak heater-cathode voltage:
Heater negative with respect to cathode .................. 200 max. volts
Heater positive with respect to cathode ................. 200a max. volts
Direct Interelectrode Capacitances (Approx.):b
Grid No.1 to plate ............................................. 0.7 µf
Grid No.1 to cathode & grid No.3, grid No.2, and heater .... 9 µf
Plate to cathode & grid No.3, grid No.2, and heater ....... 7.5 µf

Mechanical:
Operating Position .............................................. Any
Type of Cathode ................................................. Coated Unipotential
Maximum Overall Length ...................................... 3-5/16"
Maximum Seated Length ...................................... 2-3/4"
Maximum Diameter ............................................. 1-9/32"
Dimensional Outline .......................................... See General Section
Bulb ................................................................. T9
Bases (Alternates):
Intermediate-Shell Octal:
7-Pin, Arrangement 1 (JEDEC Group 1, No.B7-7)
Short Intermediate-Shell Octal with External Barriers:
7-Pin, Arrangement 1 (JEDEC Group 1, No.B7-59)
Basing Designation for BOTTOM VIEW .................. 7S

AF POWER AMPLIFIER — Class A1

Maximum Ratings, Design-Maximum Values:
PLATE VOLTAGE .................................................. 350 max. volts
GRID-No.2 (SCREEN-GRID) VOLTAGE ....................... 315 max. volts
GRID-No.2 INPUT ................................................. 2.2 max. watts
PLATE DISSIPATION ................................................ 14 max. watts

Typical Operation and Characteristics:
Plate Voltage ................................................... 60 250 volts
Grid-No.2 Voltage ............................................. 250 250 volts
Grid-No.1 (Control-Grid) Voltage .......................... 0 -12.5 volts
Peak AF Grid-No.1 Voltage ................................... – 12.5 volts
Zero-Signal Plate Current ........ 100c 45 ma
Max.-Signal Plate Current ........ - 47 ma
Zero-Signal Grid-No.2 Current .... 22c 4.5 ma
Max.-Signal Grid-No.2 Current .... - 7 ma
Plate Resistance (Approx.) ........ - 50000 ohms
Transconductance ................. - 4100 μmhos
Load Resistance ................... - 5000 ohms
Total Harmonic Distortion ........ - 7 %
Max.-Signal Power Output .......... - 4.5 watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:
   For fixed-bias operation ........ 0.1 max. megohm
   For cathode-bias operation ...... 0.5 max. megohm

a The dc component must not exceed 100 volts.
b Without external shield.
c This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.