Beam Power Tube

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:
  Voltage (AC or DC) .............. 6.3 volts
  Current ...................... 0.8 amp

Direct Interelectrode Capacitances:
  Grid No.1 to plate .............. 0.7 max. μf
  Grid No.1 to cathode & grid No.3,
    grid No.2, and heater ........ 10 μf
  Plate to cathode & grid No.3,
    grid No.2, and heater ....... 5.1 μf

Characteristics, Class A1 Amplifier:

  Plate Voltage ................ 60 250 volts
  Grid-No.2 Voltage .............. 250 250 volts
  Grid-No.1 Voltage .............. 0  18 volts
  Mu Factor, Grid No.1 to Grid No.2 .... 8.7
  Plate Resistance (Approx.) .... 0.05 megohm
  Transconductance ............. 5100 μhos
  Plate Current ................ 180b 40 ma
  Grid-No.2 Current ............. 30b  3 ma
  Grid-No.1 Voltage (Approx.) for
    plate ma. = 0.2 .............  37 volts

Mechanical:

Operating Position ................ Any
Maximum Overall Length ............. 3-1/16"
Maximum Seated Length ............. 2-13/16"
Length, Base Seat to Bulb Top (Excluding tip) .... 2-7/16" ± 3/32"
Diameter ................................ 0.750" to 0.850"
Dimensional Outline ............. See General Section
Bulb .................................. T6-1/2
Base .................................. Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW ..... 9HN

Pin 1 - Grid No.2
Pin 2 - No Connection
Pin 3 - Grid No.1
Pin 4 - Heater
Pin 5 - Heater
Pin 6 - Grid No.1

Pin 7 - Cathode, Grid No.3
Pin 8 - Internal Connection— Do Not Use
Pin 9 - Plate

VERTICAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Center Values Except as Noted:

For operation in a 525-line, 30-frame system:

DC PLATE VOLTAGE ................. 315 max. volts
PEAK POSITIVE-PULSE PLATE VOLTAGE
  (Absolute maximum) ............ 2200 volts max.

r Indicates a change.
DC GRID-No.2 (SCREEN-GRID) VOLTAGE ... 285 max. volts
PEAK NEGATIVE-PULSE GRID-No.1
(CONTROL-GRID) VOLTAGE ........... 250 max. volts
CATHODE CURRENT:
Peak .................................. 210 max. ma
Average ................................ 60 max. ma
GRID-No.2 INPUT ................... 1.5 max. watts
PLATE DISSIPATION ................. 10 max. watts
PEAK HEATER-CATHODE VOLTAGE:
Heater negative with respect to cathode. 200 max. volts
Heater positive with respect to cathode. 200 max. volts
BULB TEMPERATURE (At hottest point
on bulb surface) .................. 250 max. °C

Maximum Circuit Values:
Grid-No.1-Circuit Resistance:
For fixed-bias operation ............ 2.2 max. megohms
For cathode-bias operation ....... 2.2 max. megohms

a Without external shield.
b 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.
c As described in "Standards of Good Engineering Practice Concerning
Television Broadcast Stations," Federal Communications Commission.
d This rating is applicable when the duration of the voltage pulse does
not exceed 15 per cent of one vertical scanning cycle. In a 525-line,
30-frame system, 15 per cent of one vertical scanning cycle is 2.5
milliseconds.
e Under no circumstances should this absolute-maximum value be exceeded.
f The dc component must not exceed 100 volts.