MECHANICAL DATA

Bulb .............................................. ST-12
Base .................................. B7-2 Small Shell Octal
Basing ............................................ 6 AM
Top Cap .............................................. C1-2 or C1-3 Skirted Miniature
Cathode ........................................... Coated Unipotential
Mounting Position .............................. Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage .................................. 6.3 Volts
Heater Current .................................. 1.2 Amperes
Maximum Heater-Cathode Voltage
  Heater Negative with Respect to Cathode
    Total DC and Peak ................................ 200 Volts
  Heater Positive with Respect to Cathode
    DC ............................................. 100 Volts
    Total DC and Peak ................................ 200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Approximate)

Grid to Plate .................................. 0.6 μf
Input .................................. 15 μf
Output .................................. 7.5 μf

RATINGS (Design Center Values — Except as Noted)

Horizontal Deflection Amplifier
DC Plate Supply Voltage
  (Boost + DC Power Supply) ................. 600 Volts Max.
Peak Positive Plate Voltage (Abs. Max.) .... 6000 Volts
Peak Negative Plate Voltage ................. 1250 Volts Max.
Plate Dissipation^2 ..................... 11 Watts Max.
Peak Negative Grid #1 Voltage ............... 300 Volts Max.
DC Grid #2 Voltage ......................... 175 Volts Max.
Grid #2 Dissipation ......................... 2.5 Watts Max.
Average Cathode Current ..................... 110 Ma Max.
Peak Cathode Current ......................... 400 Ma Max.
Grid #1 Circuit Resistance ................. 0.47 Megohms Max.
Bulb Temperature (At Hottest Point) ...... 200° C Max.

AVERAGE CHARACTERISTICS

Pentode Operation: With E_n—250 V, E_c—150 V and E_v—22.5 V
  Plate Current ................................ 55 Ma
  Grid #2 Current ................................ 2.1 Ma
  Transconductance ............................. 5500 μmhos
  Plate Resistance .............................. 20,000 Ohms

Zero Bias: With E_n—60 V and E_v—150 V (Instantaneous Values)
  Plate Current ................................ 225 Ma
  Grid #2 Current ................................ 25 Ma

Cutoff: For I_n—1 ma with E_n—250 V and E_v—150 V
  Grid #1 Voltage (approx.) .................. —46 Volts

Triode Amplification Factor: With
  E_n—E_v—150 V and E_c—22.5 V ............. 4.3
NOTES:

1. For operation in a 525-line, 30-frame system as described in "Standards of Good Engineering Practice for Television Broadcasting Stations; Federal Communications Commission". The duty cycle of the voltage pulse not to exceed 15% of a scanning cycle.

2. In stages operating with grid leak bias, an adequate cathode bias resistor or other suitable means is required to protect the tube in the absence of excitation.