ELECTRICAL DATA:

GENERAL DATA:

Cathode: Indirectly Heated Oxide Coated

Heater Voltage ---------------------- 6.3 Volts
Heater Current ---------------------- 4.8 Amps
Warming up Time --------------------- 60 Sec
Amplification Factor Grid No.2 to Grid No.1 ----------------------------------- 6

Direct Interelectrode Capacitances,

Grid No.1 to Plate ------------------ 1.5 \mu F
Input --------------------------------- 50 \mu F
Output -------------------------------- 20 \mu F
Heater to Cathode ------------------- 25 \mu F
Transconductance ------------------- 20 millimhos
(for I_b=300mA; E_b=500Vdc; E_c2=200Vdc)

Maximum Frequency for Maximum Ratings - 10MHz/s

MECHANICAL DATA:

Base:

Upper Part -------------------------- A93
Bottom Part ------------------------- E32S-2

Cooling: Natural Convection and Radiation, or Forced Air Cooling

Maximum Bulb Temperature ------------ 175°C

Mounting Position: Vertical, bottom base down or up

Dimensions:

TERMINAL CONNECTIONS

1; Heater
3; Grid No.2
5; Grid No.1 and Cathode
4; Grid No.3 and Cathode
P; Plate

Nippon Electric Co., Ltd.
Overall Length ----------------------------- 175-6mm
Maximum Diameter ------------------------- 93 mm
Net weight ------------------------------- 370 gr (approx.

AF POWER AMPLIFIER AND MODULATOR-CLASS AB1

MAXIMUM RATINGS:

DC Plate Voltage ------------------------- 1250 Volts
DC Grid No.2 Voltage --------------------- 400 Volts
Max. Signal DC Plate Current * ---------- 600 mA
Max. Signal Plate Input * ---------------- 450 Watts
Plate Dissipation ------------------------ 150 Watts
Peak Heater to Cathode Voltage ---------- ±500 Volts

Note: When fixed bias is used, grid No.1 circuit resistance should be the value of 50KΩ or less.

TYPICAL OPERATION; (Values are for two tubes)

DC Plate Voltage ------------------------- 800 1000 Volts
DC Grid No.2 Voltage --------------------- 300 300 Volts
DC Grid No.1 Voltage --------------------- -50 -50 Volts
Peak AF Grid No.1 to Grid No.1 Voltage --- 100 100 Volts
Max. Signal DC Plate Current ------------- 800 720 mA
Zero-Signal DC Plate Current ------------- 100 80 mA
Max. Signal DC Grid No.2 Current ------- 80 70 mA
Effective Load Resistance (Plate to Plate) --- 1900 2800 Ohms
Plate Power Output (approx.) ------------ 380 450 Watts

CATHODE FOLLOWER AMPLIFIER; (Values are for two tubes)

DC Plate Voltage ------------------------- 800 1000 Volts
DC Grid No.2 Voltage .......................... 300  300 Volts
DC Grid No.1 Voltage .......................... -50  -50 Volts
Peak AF Grid No.1 to Grid No.1 Voltage .......... 1200  1600 Volts
Max. Signal DC Plate Current** .................. 800  720 mA
Max. Signal Peak Plate Current .................. 1.3  1.2 Amps
Zero-Signal DC Plate Current .................... 100  80 mA
Max. Signal DC Grid No.2 Current** ............... 80  70 mA
Peak AF Cathode to Cathode Voltage ............... 1200  1600 Volts
Plate Power Output (approx.) ..................... 380  450 Watts

Note: Peak Cathode to Grid No.1 Voltage should never exceed ±300 Volts.

* Average value over any audio-frequency-cycle of sine wave form.
** Value of pure resistance load.