MECHANICAL DATA

Base ................................... Shortened Octal
Cathode .................................. Coated Unipotential
Flanges .................................. UG-344/U
Cooling .................................. Forced Air, 20 CFM
Weight .................................... 2 Lbs
Mounting Position ...................... Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage (±10%) .................... 6.3 Volts
Heater Current .......................... 2.0 Amperes Nom.

DIRECT INTERELECTRODE CAPACITANCES

Gun to Shell ............................. 8 μf Max.

RATINGS (Absolute Values)

Beam Voltage ............................ 625 Volts Max.
Beam Current ............................ 150 Ma Max.
Control Electrode Voltage
(with Respect to Cathode) ............. 0 to −50 Volts Max.
Control Electrode Current ............. 2.0 Ma Max.
D C Beam Power Input .................... 100 Watts Max.
Operating Temperature
    Shell .................................. 100°C Max.
    Base .................................. 75°C Max.
Tuning Range ......................... 5900 to 6450 Mc Max.

CHARACTERISTICS

Output Resonator Bandwidth ........... ≥ 25 Mc
Output Resonator VSWR ................. ≤ 2
Buncher Resonator Bandwidth ......... ≤ 15 Mc
Buncher Resonator VSWR ............... ≤ 2
Power Output (Amplifier) ............... 6 to 9 Watts

TYPICAL OPERATION

Resonator Voltage ........................ 500 600 Volts d c
Control Electrode Voltage ............. 0 0
Beam Current ........................... 100 130 Ma d c

Amplifier Service

Input Drive Frequency .................. 6175 6175 Mc
Output Frequency ...................... 6175 6175 Mc
R F Power Input ........................ 6 1.0 Watts
R F Power Output ....................... 4.0 8.0 Watts

Synchrodyne Operation

Input Drive Frequency .................. 6175 Mc
Electron Gun Modulation Frequency .......................... 115 Mc
Electron Gun Modulation Voltage .................. 55 Volts rms
Synchrodyne Output Frequency ........ 6060 or 6290 Mc
Synchrodyne R F Power Output .......... 1.25 Watts
APPLICATION DATA

The Type 6465 klystron amplifier is designed for CW service as master oscillator, power amplifier, or synchrony mixer in studio television relay link or similar services. It features two independently tuned integral cavities. Usable with lower output outside the specified frequency range.

AVERAGE CHARACTERISTICS
POWER OUTPUT VS BEAM VOLTAGE

![Graph showing power output vs beam voltage for 400, 500, and 625 volts at various frequencies between 5800 and 6600 MC.](image)
AVERAGE CHARACTERISTICS.
RF OUTPUT POWER VS BEAM VOLTAGE
(AMPLIFIER OPERATION)
AVERAGE CHARACTERISTICS
RF POWER OUTPUT VS RF POWER INPUT

\[ \text{RF Output Power in Watts} \ vs \ \text{RF Power Input in Watts} \]
AVERAGE CHARACTERISTICS
POWER OUTPUT VS SYNCRO DRIVE VOLTAGE
PIN CONNECTIONS:
PINS 1, 7, 8 - CATHODE HEATER
PIN 2 - HEATER
PINS 3, 4, 5 - FOCUS ELECTRODE
PIN 6 - INTERNAL CONNECTION