**POWER TRIODE**

**DESCRIPTION**
The Nuocor tube type 6366 is a forced-air-cooled, three-electrode tube, specifically designed for use as an industrial oscillator. The anode is capable of dissipating 3 kilowatts. It features a sturdy-supported, double-spiral, thoriated tungsten filament. Rugged Kovar grid and filament seals insure greater protection against mechanical stress and shock. The wide spacing between elements and the high efficiency, low pressure radiator are additional features of this tube. Flexible leads constructed of O.F.H.C. copper can be modified to individual customer requirements.

Full input ratings apply to 30 mc. Reduced ratings as indicated, are applicable for useful power outputs extending to 50 mc.

**SPECIFICATIONS**

**ELECTRICAL:**

- Filament Voltage ................. 11 Volts
- Filament Current ................. 29 Amperes
- Amplification Factor ............. 25
  \[ E_c = -200V, I_b = 0.2 \text{ A} \]
- Inter-electrode Capacitances
  - Grid-Plate .................. 13 \( \mu \text{F} \)
  - Grid-Filament ............. 14.5 \( \mu \text{F} \)
  - Plate-Filament .......... 1.7 \( \mu \text{F} \)

**PHYSICAL:**

- Mounting Position — Vertical, Anode Down
- Type of Cooling — Forced Air
  - Maximum Incoming Air Temperature ........ 45°C
- Required Air Flow on Anode
  - Plate Dissipation (Kilowatts) 3 2.4 1.8
  - Air Flow—Cubic Feet per min 190 125 75
  - Pressure — Inches Water 1.21 0.58 0.26
  - Maximum Glass Temperature ............ 150°C
- Net Weight, Approximate ............ 4\( \frac{1}{4} \) pounds

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**DIVISION OF NUCLEAR CORPORATION OF AMERICA**
MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

RADIO-FREQUENCY POWER AMPLIFIER AND OSCILLATOR -- CLASS C TELEGRAPHY

(Key-down conditions per tube without amplitude modulation)†

MAXIMUM RATINGS, ABSOLUTE VALUES

DC Plate Voltage ......................................................... 5,500 Volts
DC Grid Voltage ...................................................... 1,500 Volts
DC Plate Current ................................................... 1.3 Amperes
DC Grid Current ................................................... 0.15 Amperes
Plate Input .......................................................... 7 Kilowatts
Plate Dissipation ............................................... 3 Kilowatts

TYPICAL OPERATION

DC Plate Voltage ......................................................... 4,500
DC Grid Voltage .................................................... 500
Peak R-F Grid Voltage ........................................... 1,100
DC Plate Current ................................................... 1.0
DC Grid Current, Approximate .................................. 0.12
Driving Power, Approximate .................................... 120
Power Output, Approximate ....................................... 3.0

† Modulation essentially negative may be used if the positive peak of the envelope does not exceed 115 per cent of the carrier conditions.

MAXIMUM RATINGS vs. OPERATING FREQUENCY

Frequency ......................................................... 30
Percentage of Maximum Rated Plate Voltage and Plate Input
Class C — Telegraphy ........................................... 100

75 Per Cent
TERMINAL COLOR CODE
1=GRID -- BLACK
2=FLIL. -- YELLOW
3=GRID -- BLACK
4=F.C.T. -- RED
5=GRID -- BLACK
6=FLIL. -- YELLOW

FLEXIBLE COPPER LEADS
1/2 WIDE X 6 LONG
(LEADS CAN BE MODIFIED TO YOUR SPECIFICATIONS.)

ANODE RADIATOR