TRIODE POWER AMPLIFIER OSCILLATOR

The RK-31 is a high-mu triode power amplifier tube having a thoriated tungsten filament, a molybdenum plate and an isolantite base. It is designed for use as a power amplifier, oscillator or frequency multiplier.

FILAMENT RATING

Filament Voltage .................................. 7.5 volts
Filament Current .................................. 3.0 amp

DIRECT INTERELECTRODE CAPACITANCES

Grid to Plate ........................................ 10 µf
Input .................................................. 7 µf
Output ................................................ 2 µf

A-F POWER AMPLIFIER—CLASS B—TWO TUBES

MAXIMUM RATINGS

D-C Plate Voltage .................................. 1250 volts
D-C Grid Voltage .................................... 100 volts
D-C Plate Current .................................... 35 ma
R-F Grid Current ..................................... 5 amp
Plate Dissipation ...................................... 40 watts

TYPICAL OPERATION

D-C Plate Voltage .................................. 1000 volts
D-C Grid Voltage .................................... 90 volts
D-C Plate Current .................................... 35 ma
D-C Grid Current .................................... 28 ma
R-F Driving Power .................................... 40 watts
R-F Grid Current ..................................... 140 volts
Plate Dissipation ...................................... 30 watts

OPERATING NOTES

FREQUENCY RANGE

The RK-31 may be operated at the maximum ratings at frequencies up to 30 megacycles. Above 30 megacycles the reduced efficiency realized requires that the plate voltage be lowered to prevent the plate dissipation from exceeding the maximum rated value.

PLATE TEMPERATURE

The plate of the RK-31 will show a light cherry red color (See Plate Temperature Color Scale) when operated at the maximum rated plate dissipation. Dissipations above the rated value should be avoided.