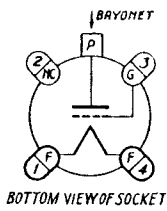


**TRIODE
POWER AMPLIFIER
OSCILLATOR**

The RK-11 is a triode type power amplifier tube having a thoriated tungsten filament, and an isolantite base. It is designed for use as a power amplifier, oscillator or frequency multiplier.



BOTTOM VIEW OF SOCKET

**AMPLIFICATION FACTOR 20
FILAMENT RATING**

Filament Voltage 6.3 volts
Filament Current 3.0 amp

DIRECT INTERELECTRODE CAPACITANCES

Grid to Plate 7 μμf
Input 7 μμf
Output 0.9 μμf

**R-F POWER AMPLIFIER OR OSCILLATOR—
CLASS C—TELEGRAPHY**

MAXIMUM RATINGS
D-C Plate Voltage 750 volts
D-C Plate Current 105 ma
D-C Grid Current 35 ma
Plate Dissipation 25 watts

TYPICAL OPERATION

D-C Plate Voltage 500 750 volts
D-C Grid Voltage -100 -120 volts
D-C Plate Current 100 105 ma
D-C Grid Current 21 21 ma
Peak R-F Input Voltage 165 170 volts
R-F Driving Power 3.1 3.2 watts
Power Output 35 55 watts

R-F POWER AMPLIFIER—CLASS B—TELEPHONY

MAXIMUM RATINGS

D-C Plate Voltage 750 volts
D-C Plate Current (Carrier) 50 ma
Plate Dissipation (Carrier) 25 watts

TYPICAL OPERATION

D-C Plate Voltage 750 volts
D-C Grid Voltage -40 volts
D-C Plate Current 44 ma
D-C Grid Current 1 ma
Peak R-F Input Voltage 110* volts
R-F Driving Power 2 * watts
Carrier Power Output 12 watts
Peak Power Output 48 * watts
*At the peak of the a-f cycle with 100% modulation.

R-F POWER AMPLIFIER—CLASS C—TELEPHONY

MAXIMUM RATINGS

	Plate Modulation	Grid Modulation	
D-C Plate Voltage	600	750	volts
D-C Plate Current (Carrier)	83	50	ma
D-C Grid Current (Carrier)	35	5	ma
Plate Dissipation (Carrier)	17	25	watts

TYPICAL OPERATION

	Plate Modulation	Grid Modulation	
D-C Plate Voltage	500 600	750	volts
D-C Grid Voltage	-100 -120	-130	volts
D-C Plate Current	83 85	38	ma
D-C Grid Current	26 24	1.2	ma
Peak R-F Input Voltage	160 170	150	volts
R-F Driving Power	3.7 3.7	2.7*	watts
Carrier Power Output	28 38	12	watts
Peak A-F Modulating Voltage	500* 600*	30*	volts
A-F Modulating Power	21 26	0.5*	watts
Peak Power Output	112* 152*	48*	watts

*At the peak of the a-f cycle with 100% modulation.

OPERATING NOTES

FREQUENCY RANGE

The construction of the RK-11 allows operation at the maximum ratings at frequencies up to 60 megacycles. Above 60 megacycles the reduced efficiency realized requires that the plate voltage be lowered to prevent the plate dissipation from exceeding the maximum rated value.

BIAS

A fixed bias voltage of at least 30 volts should be used with a plate voltage of 750 volts in order to protect the tube in case of failure of bias or excitation. The fixed bias may be reduced with lower plate voltage.

PLATE TEMPERATURE

The plate of the RK-11 will not show color when operated at the maximum rated plate dissipation. Dissipations above the rated value should be avoided.

