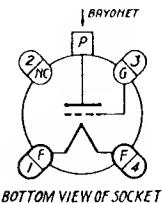


TRIODE POWER AMPLIFIER OSCILLATOR

The RK-12 is a high-mu 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

FILAMENT RATING

Filament Voltage	6.3	volts
Filament Current	3.0	amp

DIRECT INTERELECTRODE CAPACITANCES

Grid to Plate	7	μf
Input	7	μf
Output	0.9	μf

A-F POWER AMPLIFIER—CLASS B—TWO TUBES

MAXIMUM RATINGS

D-C Plate Voltage	750	volts
D-C Plate Current (per tube)	105	ma
Plate Dissipation (per tube)	25	watts

(Averaged over 1 cycle)

TYPICAL OPERATION

D-C Plate Voltage	750	volts
D-C Grid Voltage	0	volts
D-C Plate Current (no signal)	50	ma
D-C Plate Current (max. signal)	200	ma
D-C Grid Current (max. signal)	65	ma
Peak A-F Grid Voltage (grid to grid)	129	volts
A-F Driving Power	3.4	watts
Load Resistance (plate to plate)	9600	ohms
Power Output	100	watts

R-F POWER AMPLIFIER—CLASS C—TELEGRAPHY

MAXIMUM RATINGS

D-C Plate Voltage	750	volts
D-C Plate Current	105	ma
D-C Grid Current	40	ma
Plate Dissipation	25	watts

TYPICAL OPERATION

D-C Plate Voltage	500	750	volts
D-C Grid Voltage	-100	-100	volts
D-C Plate Current	100	105	ma
D-C Grid Current	32	35	ma
Peak R-F Input Voltage	160	165	volts
R-F Driving Power	4.6	5.2	watts
Power Output	35	55	watts

R-F POWER AMPLIFIER—CLASS C—TELEPHONY

PLATE MODULATION

MAXIMUM RATINGS

D-C Plate Voltage	600	volts
D-C Plate Current	85	ma
D-C Grid Current	40	ma
Plate Dissipation	17	watts

TYPICAL OPERATION

D-C Plate Voltage	500	600	volts
D-C Grid Voltage	-100	-100	volts
D-C Plate Current	85	85	ma
D-C Grid Current	27	27	ma
Peak R-F Input Voltage	148	155	volts
R-F Driving Power	3.6	3.8	watts
Carrier Power Output	30	38	watts
A-F Modulating Power	21	26	watts
Peak Power Output	120	152	watts

OPERATING NOTES

FREQUENCY RANGE

The construction of the RK-12 allows operation at the maximum ratings at frequencies up to 60 megacycles. Above 60 megacycles reduced efficiency 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-12 will not show color when operated at the rated plate dissipation. Dissipations above the rated value should be avoided.

