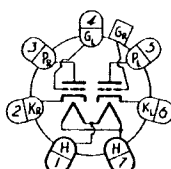




TWIN TRIODE AMPLIFIER OSCILLATOR

The RK-33 is a heater type twin triode amplifier tube having an isolantite base. It is designed for use in circuits where but one triode is operated at the maximum ratings. One triode may be operated at the maximum ratings as a Class C amplifier or oscillator while the other triode is operated as a low power oscillator, resistance coupled amplifier or detector.



BOTTOM VIEW OF SOCKET

R-F POWER AMPLIFIER—CLASS C—TELEGRAPHY—ONE TRIODE

MAXIMUM RATINGS

D-C Plate Voltage	250	volts
D-C Plate Current	20	ma
D-C Grid Current	6	ma
Plate Dissipation	2.5	watts

TYPICAL OPERATION

D-C Plate Voltage	250	volts
D-C Grid Voltage	-60	volts
D-C Plate Current	20	ma
D-C Grid Current	6	ma
Peak R-F Input Voltage	100	volts
R-F Driving Power	0.54	watts
Power Output	3.5	watts

HEATER RATING

Heater Voltage	6.3	volts
Heater Current	0.6	amp

DIRECT INTERELECTRODE CAPACITANCES

	Left Triode	Right Triode	
Grid to Plate	3	2	μuf
Input	3	2	μuf
Output	2.5	2.5	μuf

A-F AMPLIFIER—CLASS A—ONE TRIODE

MAXIMUM RATINGS

D-C Plate Voltage	250	volts
Plate Dissipation	2.5	watts

TYPICAL OPERATION

D-C Plate Voltage	250	volts
D-C Grid Voltage	-16.5	volts
D-C Plate Current	8	ma
Amplification Factor	10.5	
Plate Resistance	8750	ohms
Transconductance	1200	μ mhos
Load Resistance	20000	ohms

OPERATING NOTES

FREQUENCY RANGE

One triode of the RK-33 may be operated at the maximum ratings at frequencies up to 60 megacycles. Above 60 megacycles the reduced efficiency realized requires that the plate voltage be reduced to prevent the plate dissipation from exceeding the maximum rated value.

BIAS

At least 15 volts of fixed bias should be used with 250 volts on the plate to protect the tube in case of failure of the bias or excitation.

PLATE TEMPERATURE

The plate of the RK-33 will not show color when operated at the maximum rated plate dissipation. Dissipations above the rated value should be avoided.

