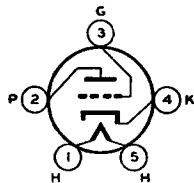


# RCA-37

## DETECTOR, AMPLIFIER

The 37 is a three-electrode general-purpose tube of the heater-cathode type for use as amplifier and detector.



### CHARACTERISTICS

HEATER VOLTAGE (A. C. or D. C.)					6.3	Volts
HEATER CURRENT					0.3	Ampere
PLATE VOLTAGE	90	135	180	250	max.	Volts
GRID VOLTAGE*	-6	-9	-13.5	-18		Volts
PLATE CURRENT	2.5	4.1	4.3	7.5		Milliamperes
PLATE RESISTANCE	11500	10000	10200	8400		Ohms
AMPLIFICATION FACTOR	9.2	9.2	9.2	9.2		
TRANSCONDUCTANCE	800	925	900	1100		Micromhos
GRID-PLATE CAPACITANCE					2.0	$\mu\mu\text{f}$
GRID-CATHODE CAPACITANCE					3.5	$\mu\mu\text{f}$
PLATE-CATHODE CAPACITANCE					2.9	$\mu\mu\text{f}$
BULB						ST-12
BASE						Small 5-Pin

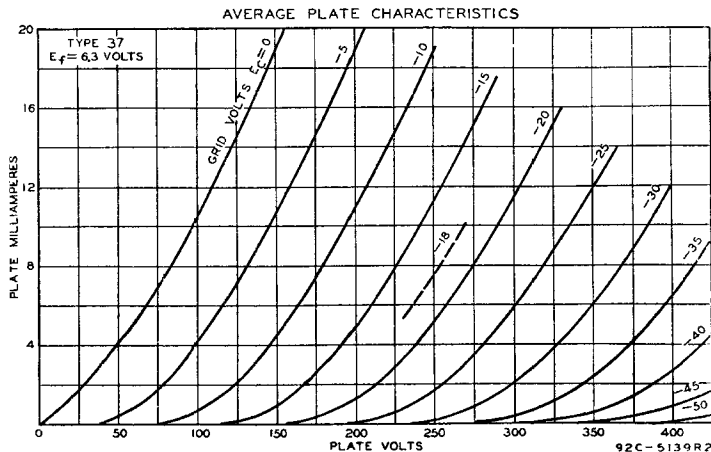
\* The d-c resistance in the grid circuit should not exceed 1.0 megohm.

### INSTALLATION AND APPLICATION

The base pins of the 37 fit the standard five-contact socket which may be installed to hold the tube in any position. For heater operation and cathode connection, refer to INSTALLATION for type 6A8.

As an amplifier, the 37 is applicable to the audio or the radio-frequency stages of a receiver. Recommended plate and grid voltages are shown under CHARACTERISTICS.

As a detector, the 37 may be operated with either grid leak and condenser or with grid bias. The plate voltage for the grid leak and condenser method is 45 volts. A grid leak of from 1 to 5 megohms used with a grid condenser of 0.00025  $\mu\text{f}$  is suitable. For grid-bias detection a plate voltage of 250 volts, together with a negative grid bias of approximately 28 volts, may be used. The plate current should be adjusted to 0.2 milliampere with no input signal.





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