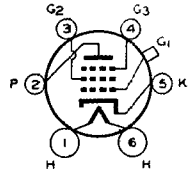
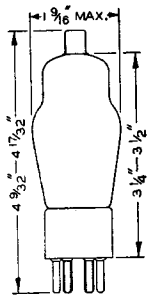


# RCA-78

## TRIPLE-GRID SUPER-CONTROL AMPLIFIER

The 78 is a triple-grid super-control amplifier tube recommended for service in the radio-frequency and intermediate-frequency stages of radio receivers designed for its character-



istics. The ability of this tube to handle usual signal voltages without cross-modulation and modulation-distortion makes it adaptable to the r-f and i-f stages of receivers employing automatic volume-control. The internal shield around the plate of the 78 is connected to the cathode within the tube.

### CHARACTERISTICS

HEATER VOLTAGE (A. C. or D. C.)	6.3	Volts
HEATER CURRENT	0.3	Ampere
PLATE VOLTAGE	90 180 250 max. 250 max.	Volts
SCREEN VOLTAGE	90 75 100 125 max.	Volts
GRID VOLTAGE (Minimum)	-3 -3 -3 -3	Volts
SUPPRESSOR	Connected to cathode at socket	
PLATE CURRENT	5.4 4.0 7.0 10.5	Milliamperes
SCREEN CURRENT	1.3 1.0 1.7 2.6	Milliamperes
PLATE RESISTANCE	0.315 1.0 0.8 0.6	Megohm
AMPLIFICATION FACTOR	400 1100 1160 990	
TRANSCONDUCTANCE	1275 1100 1450 1650	
GRID VOLTAGE*	-38.5 -32.5 -42.5 -52.5	Micromhos
GRID-PLATE CAPACITANCE (With shield-can)	0.007 max.	Volts
INPUT CAPACITANCE	4.5	$\mu\mu\text{f}$
OUTPUT CAPACITANCE	11.0	$\mu\mu\text{f}$
BULB		ST-12
CAP		Small Metal
BASE		Small 6-Pin

\* For transconductance = 2 micromhos.

### INSTALLATION AND APPLICATION

The base pins of the 78 fit the standard six-contact socket which may be installed to hold the tube in any position. Heater operation and cathode connection are the same as for the type 6A8. Control-grid bias variation, screen voltage supply, and suppressor connection follow the methods given under INSTALLATION for the type 6D6. Shielding requirements are similar to those of the type 6C6. Refer to APPLICATION on the type 6K7.

A plate family of characteristic curves is given at the bottom of page 147.



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