

1620

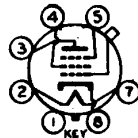


1620

### TRIPLE-GRID DETECTOR AMPLIFIER

For applications critical as to microphonics

→ Heater	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.3	amp.
Direct Interelectrode Capacitances: <sup>o</sup>		
<i>Pentode Connection</i>		
Grid to Plate	0.005 max.	μuf
Input	7.0	μuf
Output	12.0	μuf
Maximum Overall Length		3-1/8"
Maximum Seated Height		2-9/16"
Maximum Diameter		1-5/16"
Bulb		Metal Shell, MT-8
Cap		Miniature
Base		Small Wafer Octal 7-Pin
Pin 1 - Shell		Pin 5 - Suppressor
Pin 2 - Heater		Pin 7 - Heater
Pin 3 - Plate		Pin 8 - Cathode
Pin 4 - Screen		Cap - Grid
Mounting Position	BOTTOM VIEW	Any



Maximum Ratings Are Design-Center Values

#### AMPLIFIER - Pentode Connection

Plate Voltage		250 max. volts
Screen Voltage		100 max. volts
→ <i>Typical Operation and Characteristics - Class A<sub>1</sub> Amplifier:</i>		
Plate	100	250 volts
Screen	100	100 volts
Grid #	-3	-3 volts
Suppressor	Connected to cathode at socket	
Plate Res.	1.0	▲ megohm
Transcond.	1185	1225 μmhos
Grid Bias for cathode current cut-off	-7	-7 volts
Plate Cur.	2.0	2.0 ma.
Screen Cur.	0.5	0.5 ma.

#### AMPLIFIER - Triode Connection<sup>oo</sup>

→ Plate Voltage		250 max. volts
→ <i>Typical Operation and Characteristics - Class A<sub>1</sub> Amplifier:</i>		
Plate	180	250 volts
Grid #	-5.3	-8 volts
Amp. Fact.	20	20
Plate Res.	11000	10500 ohms
Transcond.	1800	1900 μmhos
Plate Cur.	5.3	6.5 ma.

■ For cathode-bias operation of the 1620 a minimum cathode-resistor by-pass condenser of 25 μf is recommended to minimize hum, particularly in circuits where the 1620 is followed by high-gain stages. When a 25 μf condenser or larger is used, the voltage difference between heater and cathode is not critical, but it should be kept as low as possible. If less than a 25 μf condenser is used, positive or negative biasing of the heater with respect to the cathode is required, but the bias value chosen for minimum hum should be within the range of +5 to +50 volts or -5 to -50 volts.

<sup>o</sup> With shell connected to cathode.

# Under maximum rated conditions, the d-c resistance in the grid circuit should not exceed 1.0 megohm.

▲ Greater than 1.0 megohm.

<sup>oo</sup> Screen and suppressor tied to plate.

← Indicates a change.

OUTLINE DIMENSIONS for the 1620 are the same as for 1612.

Curves under Type 6J7 also apply to the 1620.

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DATA