



6BC4

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### MEDIUM-MU TRIODE

9-PIN MINIATURE TYPE

For use as rf amplifier in cathode-drive circuits  
of TV tuners covering range of 470-890 Mc

#### GENERAL DATA

##### Electrical:

Heater, for Unipotential Cathode:

|                   |       |                |
|-------------------|-------|----------------|
| Voltage . . . . . | 6.3   | ac or dc volts |
| Current . . . . . | 0.225 | amp            |

Direct Interelectrode Capacitances (Approx.):\*

|                                       |      |                  |
|---------------------------------------|------|------------------|
| Grid to plate . . . . .               | 1.6  | $\mu\mu\text{f}$ |
| Grid to heater and cathode . . . . .  | 2.9  | $\mu\mu\text{f}$ |
| Plate to heater and cathode . . . . . | 0.26 | $\mu\mu\text{f}$ |
| Heater to cathode . . . . .           | 2.7  | $\mu\mu\text{f}$ |

##### Characteristics - Class A<sub>1</sub> Amplifier:

|   |       |                  |
|---|-------|------------------|
| Plate Supply Voltage . . . . .  | 150   | volts            |
| Cathode-Bias Resistor . . . . .   | 100   | ohms             |
| Amplification Factor . . . . .  | 48    |                  |
| Plate Resistance . . . . .  | 4800  | ohms             |
| Transconductance . . . . .  | 10000 | $\mu\text{mhos}$ |
| Grid Voltage (Approx.) for plate<br>current of 10 $\mu\text{amp}$ . . . . . | -10   | volts            |
| Plate Current . . . . .   | 14.5  | ma               |

##### Mechanical:

|  |   |
|--|---|
| Mounting Position . . . . .                                | Any                                       |
| Maximum Overall Length . . . . .                           | 1-3/4"                                    |
| Maximum Seated Length . . . . .                            | 1-1/2"                                    |
| Length, Base Seat to Bulb Top<br>(Excluding Tip) . . . . . | 1-1/8" $\pm$ 3/32"                        |
| Maximum Diameter . . . . .                                 | 7/8"                                      |
| Bulb . . . . .   | T-6-1/2                                   |
| Base . . . . .   | Small-Button Noval 9-Pin (JETEC No. E9-1) |
| Basing Designation for BOTTOM VIEW . . . . .               | 9DR                                       |

Pin 1 - Plate  
Pin 2 - Grid  
Pin 3 - Grid  
Pin 4 - Heater  
Pin 5 - Heater



Pin 6 - Cathode  
Pin 7 - Grid  
Pin 8 - Grid  
Pin 9 - Plate

#### AMPLIFIER - Class A<sub>1</sub>

##### Maximum Ratings, Design-Center Values:

|   |          |       |
|---|----------|-------|
| PLATE VOLTAGE . . . . .                           | 250 max. | volts |
| PLATE DISSIPATION . . . . .                       | 2.5 max. | watts |
| CATHODE CURRENT . . . . .                         | 25 max.  | ma    |
| PEAK HEATER-CATHODE VOLTAGE:                      |          |       |
| Heater negative with respect to cathode . . . . . | 75 max.  | volts |
| Heater positive with respect to cathode . . . . . | 75 max.  | volts |

\* With no external shield.

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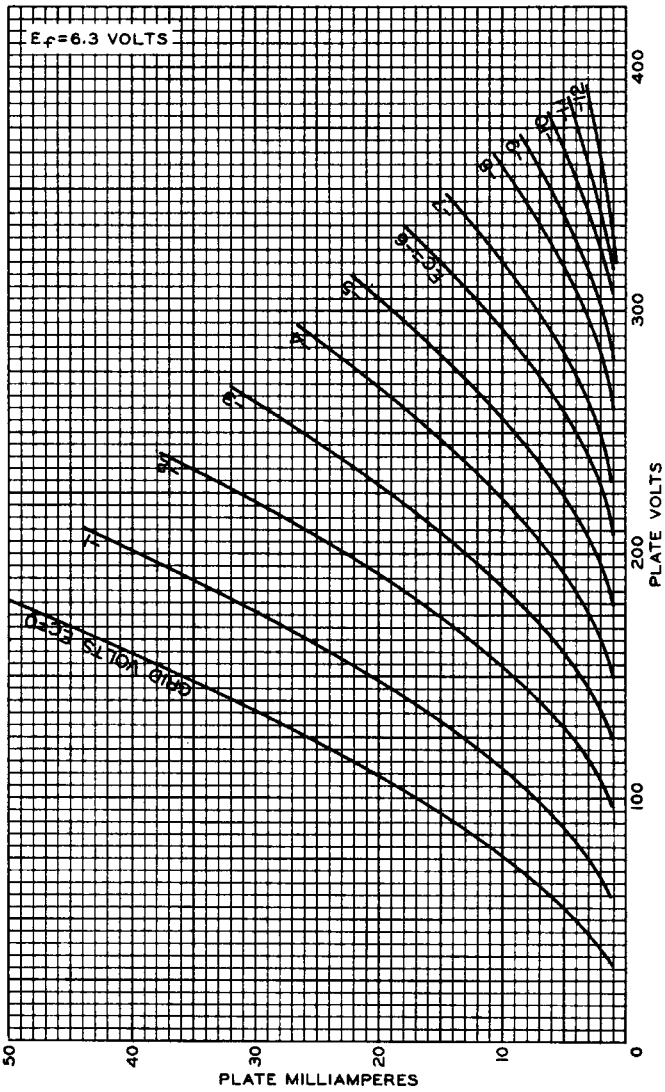
## MEDIUM-MU TRIODE

### Maximum Circuit Values (For maximum rated conditions):

#### Grid-Circuit Resistance:

|                                      |                 |
|--------------------------------------|-----------------|
| For cathode-bias operation . . . . . | 0.5 max. megohm |
| For fixed-bias operation . . . . .   | not recommended |

AVERAGE PLATE CHARACTERISTICS

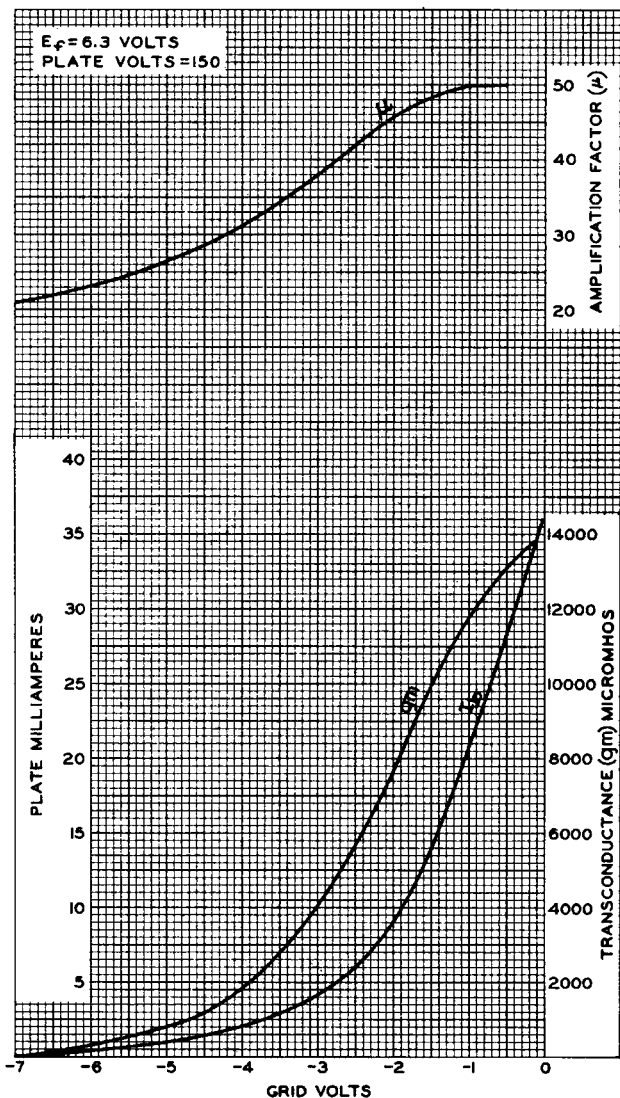


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## AVERAGE CHARACTERISTICS



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RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-8240