

## MECHANICAL DATA

|                             |                     |
|-----------------------------|---------------------|
| Bulb . . . . .              | T-9                 |
| Base . . . . .              | Lockin 8-Pin        |
| Basing . . . . .            | 8BW                 |
| Cathode . . . . .           | Coated Unipotential |
| Mounting Position . . . . . | Any                 |

## RATINGS

|                                                        |                    |
|--------------------------------------------------------|--------------------|
| Shock (Intermittent Service-Abs. Max.) . . . . .       | 350 g              |
| Vibration (Continuous Service-Design Center) . . . . . | 2.5 g              |
| Mechanical Resonance . . . . .                         | None Below 100 cps |

## ELECTRICAL DATA

### HEATER CHARACTERISTICS

|                                              |           |
|----------------------------------------------|-----------|
| Heater Voltage (Avg.) . . . . .              | 6.3 Volts |
| Heater Voltage (Abs. Max.) . . . . .         | 7.0 Volts |
| Heater Voltage (Design Center) . . . . .     | 6.3 Volts |
| Heater Current (Avg.) . . . . .              | 300 Ma    |
| Heater Current (Max.) <sup>1</sup> . . . . . | 325 Ma    |
| Heater Current (Min.) <sup>1</sup> . . . . . | 275 Ma    |

### DIRECT INTERELECTRODE CAPACITANCES

(Each Section — Shielded)<sup>2</sup>

|                                                 | Min. <sup>1</sup> | Max. <sup>1</sup>    |
|-------------------------------------------------|-------------------|----------------------|
| Grid to Plate . . . . .                         | 1.2               | 2.0 $\mu\mu\text{f}$ |
| Input . . . . .                                 | 2.1               | 3.8 $\mu\mu\text{f}$ |
| Output . . . . .                                | 1.3               | 2.1 $\mu\mu\text{f}$ |
| Grid to Grid . . . . .                          | .02               | .10 $\mu\mu\text{f}$ |
| Plate to Plate . . . . .                        | 0.1               | 0.4 $\mu\mu\text{f}$ |
| Heater to Either Cathode <sup>3</sup> . . . . . | 1.4               | 3.0 $\mu\mu\text{f}$ |

## RATINGS

|                                                 | Absolute Max. | Design Center   |
|-------------------------------------------------|---------------|-----------------|
| Plate Voltage . . . . .                         | 330           | 300 Volts       |
| Plate Dissipation Each Plate . . . . .          | 3.5           | 3.2 Watts       |
| Total Plate Dissipation (Both Plates) . . . . . | 5.0           | 4.5 Watts       |
| Positive Control Grid Voltage . . . . .         |               | 0 Volts         |
| Heater-Cathode Voltage . . . . .                | $\pm 250$     | $\pm 230$ Volts |

## CHARACTERISTICS AND TYPICAL OPERATION

### Class A Amplifier (Each Section)

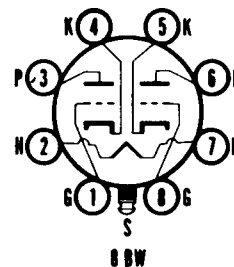
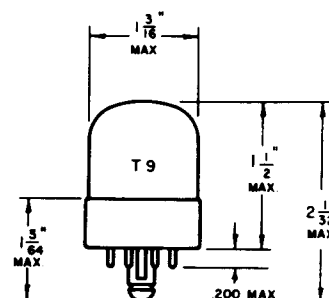
|                                                     | Min. <sup>1</sup> | Avg. | Max. <sup>1</sup>     |
|-----------------------------------------------------|-------------------|------|-----------------------|
| Plate Voltage . . . . .                             |                   | 250  | Volts                 |
| Cathode Bias Resistor . . . . .                     |                   | 200  | Ohms                  |
| Plate Current . . . . .                             | 8.0               | 10.5 | 14.0 Ma               |
| Transconductance . . . . .                          | 4500              | 5200 | 6800 $\mu\text{mhos}$ |
| Amplification Factor . . . . .                      | 40                | 50   | 65                    |
| Plate Current at $E_c = -9$ Volts . . . . .         | 1.0               |      | 700 $\mu\text{a}$     |
| Plate Current at $E_c = -25$ Volts . . . . .        | 0                 |      | 1.0 $\mu\text{a}$     |
| Heater-Cathode Leakage at $\pm 150$ Volts . . . . . |                   |      | 20 $\mu\text{a}$      |
| Grid Current . . . . .                              |                   |      | 1.5 $\mu\text{a}$     |

## NOTES:

1. Limits given here are extremes which may be found in production.
2. With Standard RTMA Shield No. 308 connected to cathode.
3. External shield connected to ground.

## QUICK REFERENCE DATA

Rugged high transconductance double triode designed for use in applications requiring resistance to shock and vibration.

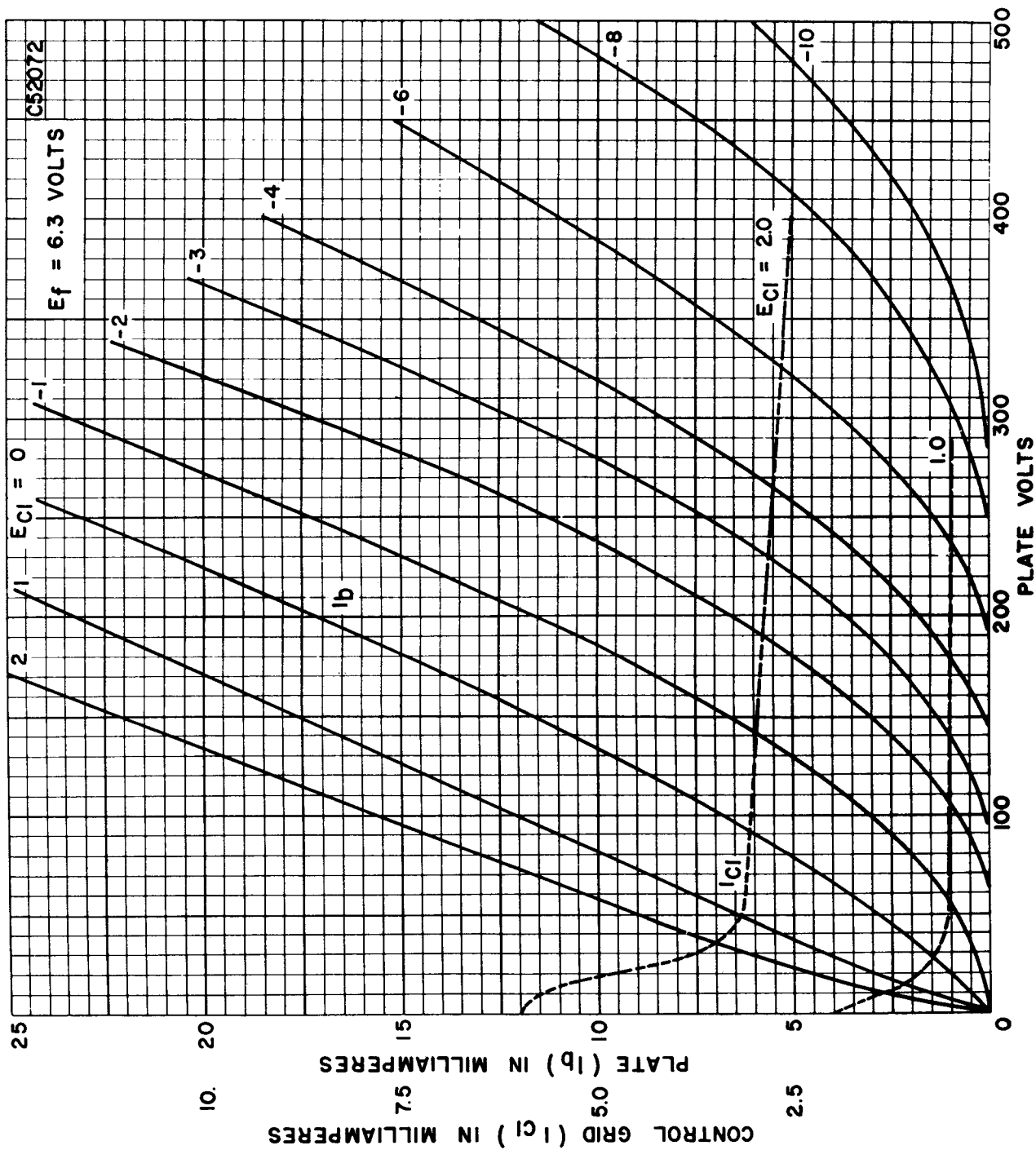


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AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

