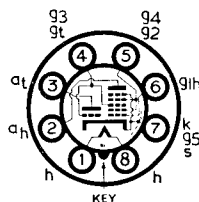
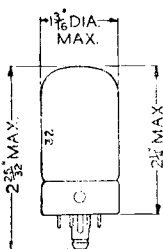


Replacement Type

# **TYPE 7S7** **(LOCTAL BASE)** **TRIODE-HEPTODE** **FREQUENCY CHANGER**



The BRIMAR type 7S7 is an indirectly heated triode-heptode of the "all glass" construction, fitted with a lock-in type base. Type 7S7 features high conversion, together with high anode impedance and will operate efficiently at frequencies up to 100 Mc/s.

## RATINGS

|                                       |     |     |     |     |     |            |
|---------------------------------------|-----|-----|-----|-----|-----|------------|
| Heater Voltage                        | ... | ... | ... | ... | 6.3 | volts      |
| Heater Current                        | ... | ... | ... | ... | 0.3 | amp.       |
| Heptode Anode Voltage                 | ... | ... | ... | ... | 300 | volts max. |
| Heptode Screen ( $g_2, g_4$ ) Voltage | ... | ... | ... | ... | 100 | volts max. |
| Triode Anode Supply Voltage           | ... | ... | ... | ... | 300 | volts max. |
| Total Cathode Current                 | ... | ... | ... | ... | 14  | mA max.    |

## OPERATING CHARACTERISTICS

|                                        |     |     |     |        |        |       |
|----------------------------------------|-----|-----|-----|--------|--------|-------|
| Heptode Anode Voltage                  | ... | ... | ... | 100    | 250    | volts |
| Heptode Anode Current                  | ... | ... | ... | 1.9    | 1.8    | mA    |
| Heptode Screen Voltage                 | ... | ... | ... | 100    | 100    | volts |
| Heptode Screen Current                 | ... | ... | ... | 3.0    | 3.0    | mA    |
| Heptode Control Grid ( $g_1$ ) Voltage | ... | ... | ... | -2     | -2     | volts |
| Cathode Bias Resistor                  | ... | ... | ... | 250    | 200    | ohms  |
| Heptode Anode Impedance                | ... | ... | ... | 0.5    | 1.25   | meg.  |
| Triode Anode Supply Voltage            | ... | ... | ... | 100    | 250    | volts |
| Triode Anode Resistor                  | ... | ... | ... | -      | 20,000 | ohms  |
| Triode Anode Voltage                   | ... | ... | ... | 100    | 150    | volts |
| Triode Anode Current                   | ... | ... | ... | 3.0    | 5.0    | mA    |
| Triode Grid Current                    | ... | ... | ... | 0.3    | 0.4    | mA    |
| Triode Grid Resistor                   | ... | ... | ... | 50,000 | 50,000 | ohms  |
| Conversion Conductance                 | ... | ... | ... | 0.5    | 0.53   | mA/V  |
| Heptode Control Grid Voltage           | ... | ... | ... | -21    | -21    | volts |

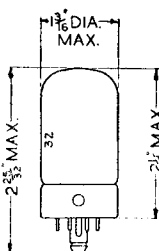
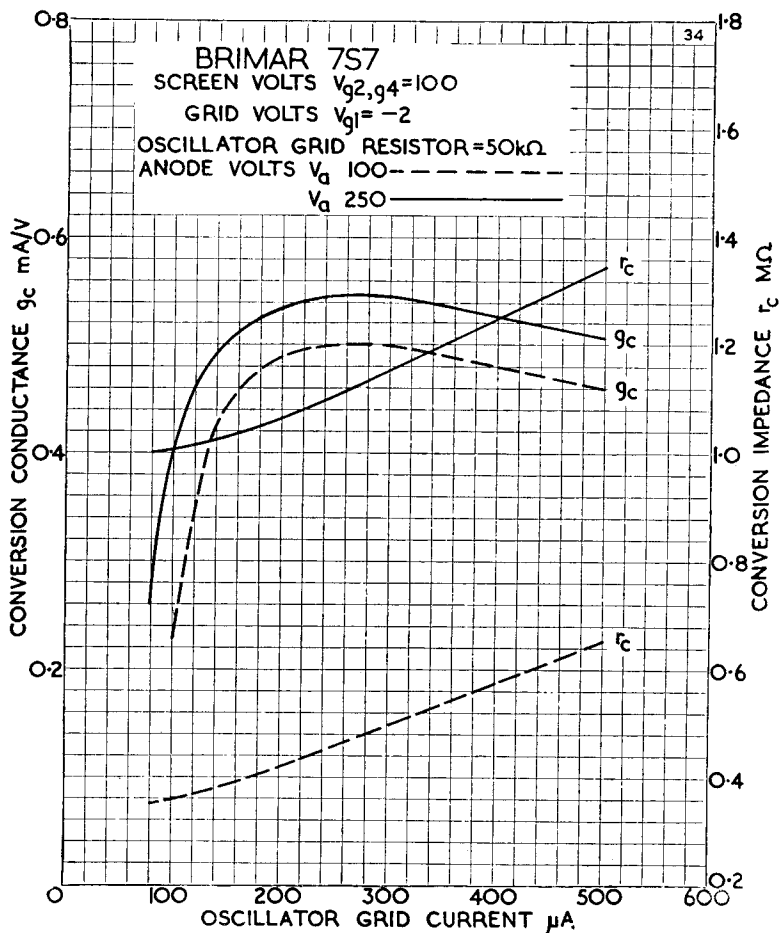
(For Conversion Conductance of 0.005 mA/V)

## INTER-ELECTRODE CAPACITANCES \*

|                                                         |     |     |     |      |         |
|---------------------------------------------------------|-----|-----|-----|------|---------|
| R.F. Input ( $g_1$ to all except $a_h$ )                | ... | ... | ... | 5.0  | pF      |
| I.F. Output ( $a_h$ to all except $g_1$ )               | ... | ... | ... | 8.0  | pF      |
| Oscillator Input ( $g_2$ to all except $a_t$ )          | ... | ... | ... | 7.0  | pF      |
| Oscillator Output ( $a_t$ to all except $g_2$ )         | ... | ... | ... | 3.5  | pF      |
| Control Grid ( $g_1$ ) to Heptode Anode ( $a_h$ )       | ... | ... | ... | 0.03 | pF max. |
| Oscillator Grid ( $g_t$ ) to Oscillator Anode ( $a_t$ ) | ... | ... | ... | 1.0  | pF      |

\* With close fitting shield connected to Cathode.

7S7  
7Y4

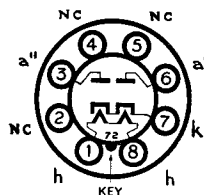


Replacement Type

**TYPE 7Y4**

(LOCTAL BASE)

**FULL-WAVE RECTIFIER**



|                |     |     |     |     |     |     |           |
|----------------|-----|-----|-----|-----|-----|-----|-----------|
| Heater Voltage | ... | ... | ... | ... | ... | ... | 6.3 volts |
| Heater Current | ... | ... | ... | ... | ... | ... | 0.5 amp.  |

Other characteristics as type 6X4.