**ARCTURUS**

**TYPE 6MSGT MIDGET**

**DIODE — TRIODE — PENTODE**

**HEATER VOLTAGE** 6.3 Volts

**HEATER CURRENT** 0.6 Amperes

**PENTODE SECTION**

**PLATE VOLTAGE** 100 Volts

**SCREEN GRID VOLTAGE** 100 Volts

**CONTROL GRID VOLTAGE** 3 Volts

**PLATE CURRENT** 8.5 mA

**SCREEN GRID CURRENT** 2.7 mA

**PLATE RESISTANCE** 200,000 ohms (approx.)

**TRANSCONDUCTANCE** 1900 micromhos

**CONTROL GRID VOLTAGE FOR TRANSCONDUCTANCE = 2 umhos** 35 Volts

**TRIODE SECTION**

**PLATE VOLTAGE** 100 Volts

**GRID VOLTAGE** -1 Volt

**PLATE CURRENT** 0.5 mA

**PLATE RESISTANCE** 91,000 ohms

**TRANSCONDUCTANCE** 1100 micromhos

**AMPLIFICATION FACTOR** 100

A single plate of conventional design is provided around a cathode which is common to the Triode.

**DIRECT INTERELECTRODE CAPACITANCES**

- Pentode G1 to plate: 0.015 μf (Max)
- Pentode Input: 5.2 μf
- Pentode Output: 10.0 μf
- Triode Grid to plate: 2.5 μf
- Triode Grid to cathode: 3.7 μf
- Triode Plate to cathode: 4.5 μf
- Pentode G1 to triode grid: 0.01 μf (Max)
- Pentode Plate to triode grid: 0.10 μf (Max)
- Pentode G1 to triode plate: 0.02 μf (Max)

**APPLICATION**

Type 6MSGT has been designed primarily for small AC receivers wherein very limited space is available.

The pentode section may be used as a conventional RF or IF amplifier and the diode-triode section as detector and AF amplifier. It will be noted that the pentode suppressor grid is internally connected to the #7 pin which is common to the heater. Therefore it will be necessary that this pin be connected to B minus. Type 6MSGT is identical to Type 258GT with the exception of the heater and the suppressor grid connection.

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