

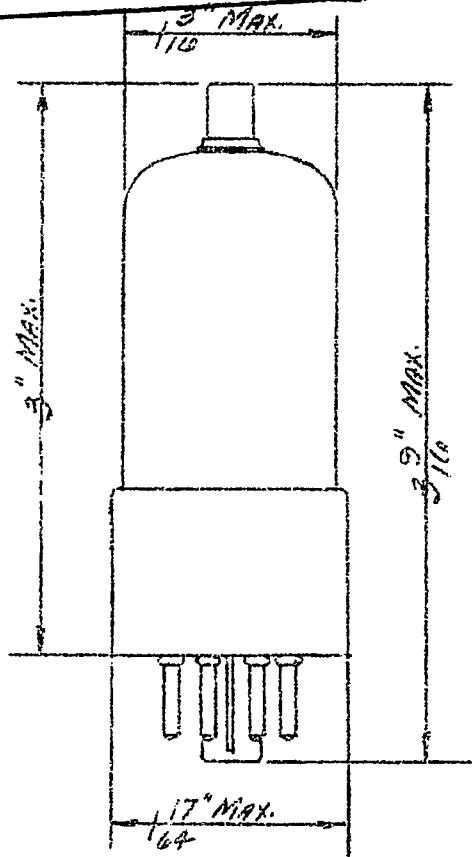
TECHNICAL DATA

#207
8/1/39

**E. I. A.
REGISTRATION
FILE**

ARCTURUS

TYPE 6MSGT MIDGET
DIODE - TRIODE - PENTODE



Heater Voltage	6.3 Volts
Heater Current	0.6 Ampere
<u>PENTODE SECTION</u>	
Plate Voltage	100 Volts
Screen Grid Voltage	100 Volts
Control Grid Voltage	-5 Volts
Plate Current	8.5 m.a.
Screen Grid Current	2.7 m.a.
Plate Resistance	200,000 ohms (approx.)
Transconductance	1900 micromhos
Control Grid Voltage for Transconductance = 2 umhos	-35 Volts

<u>TRIODE SECTION</u>	
Plate Voltage	100 Volts
Grid Voltage	-1 Volt
Plate Current	0.5 m.a.
Plate Resistance	91,000 ohms
Transconductance	1100 micromhos
Amplification Factor	100

DIODE

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

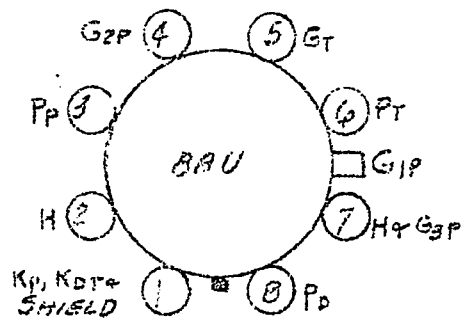
DIRECT INTERELECTRODE CAPACITANCES

Pentode G ₁ to plate	.015 uuf (Max)
Pentode Input	5.2 uuf
Pentode Output	10.0 uuf
Triode Grid to plate	2.5 uuf
Triode Grid to cathode	3.7 uuf
Triode Plate to cathode	4.5 uuf
Pentode G ₁ to triode grid	.01 uuf (Max)
Pentode Plate to triode grid	.10 uuf (Max)
Pentode G ₁ to triode plate	.02 uuf (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 6SBSGT with the exception of the heaters and the suppressor grid connection.

PIN ARRANGEMENT



BOTTOM VIEW