TECHNICAL DATA

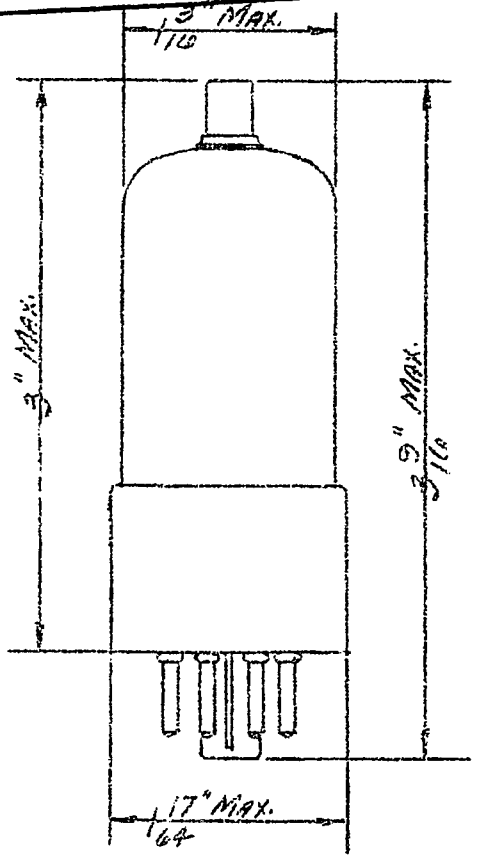
#207
8/1/39

E. I. A.
REGISTRATION
FILE

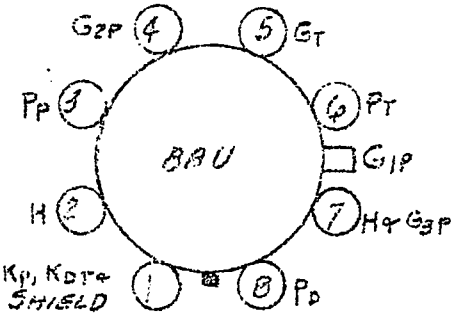
ARCTURUS

TYPE 6M8GT MIDGET

DIODE - TRIODE - PENTODE



PIN ARRANGEMENT



BOTTOM VIEW

Heater Voltage	6.3 Volts
Heater Current	0.6 Ampere

PENTODE SECTION

Plate Voltage	100 Volts
Screen Grid Voltage	100 Volts
Control Grid Voltage	-3 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

TRIODE SECTION

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 Triode.

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 6M8GT 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 6M8GT is identical to Type 25D8GT with the exception of the heaters and the suppressor grid connection.

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