ARCTURUS

TYPE 12B9GT MIDGET

TRIODE - PENTODE

Heater Voltage 12.6 Volts
Heater Current 0.3 Ampere

PENTODE SECTION

Plate Voltage 90 Volts
Screen Grid Voltage 90 Volts
Control Grid Voltage -3 Volts
Plate Current 7.0 mA
Screen Grid Current 2.0 mA
Plate Resistance 200,000 ohms
Transconductance 1800 micromhos
Amplification Factor 360
Control Grid Voltage for Transconductance = 2 umhos -42.5 Volts

TRIODE SECTION

Plate Voltage 90 Volts
Grid Voltage 0
Plate Current 2.8 mA
Plate Resistance 37,000 ohms
Transconductance 2400 micromhos
Amplification Factor 90
Approx. Grid Voltage for Plate Current cut-off -2.5 Volts

DIRECT INTERELECTRODE CAPACITANCES

Pentode G1 to plate 0.015 uuf
Pentode Input 5.2 uuf
Pentode Output 9.6 uuf
Triode Grid to plate 2.3 uuf
Triode Grid to cathode 5.0 uuf
Triode Plate to cathode 6.3 uuf
Pentode G1 to triode grid 0.002 uuf
Pentode Plate to triode grid 0.078 uuf
Pentode G1 to triode plate 0.003 uuf

APPLICATION

Type 12B9GT has been designed primarily for small AC-DC receivers wherein very limited space is available. The pentode section may be used as a conventional RF or IF amplifier and the triode section as a biased or grid-leak detector.

from RMA release #161, Feb. 15, 1939

2-9-39