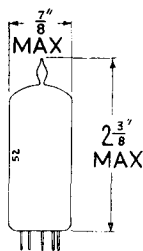
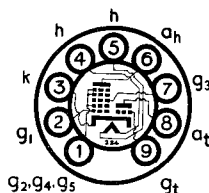


Current Equipment Type



TYPE 20D4
TRIODE-HEPTODE
FREQUENCY
CHANGER



The BRIMAR 20D4 is a triode-heptode frequency changer on the Noval (B9A) base, featuring very high conversion conductance.

RATINGS

Heater Voltage	...	...	...	...	6.3 volts
Heater Current	...	...	...	...	0.3 amps.
Heptode Anode Voltage	...	...	...	...	300 volts max.
Heptode Screen Voltage	...	...	...	...	125 volts max.
Triode Anode Voltage	...	...	...	...	150 volts max.
Total Cathode Current	...	...	...	...	17.5 mA max.

OPERATING CHARACTERISTICS

Heptode Anode Voltage	...	...	...	...	250 volts
Heptode Screen Voltage	...	...	...	...	100 volts
Heptode Control Grid (g_1) Voltage	...	...	...	...	-2 volts
Heptode Injection Grid (g_3) Voltage	...	...	...	...	0 volts
Anode Current	...	...	...	...	7.0 mA
Screen Grid Current	...	...	...	...	2.3 mA
Mutual Conductance (g_{1-a})	...	...	...	...	2.8 mA/V
Anode Impedance	...	...	...	...	0.9 Megohms
Control Grid Voltage for $g_m/100$	...	...	...	...	-20 volts
Triode Anode Voltage	...	...	...	...	100 volts
Triode Grid Voltage	...	...	...	...	0 volts
Anode Current	...	...	...	...	15 mA
Mutual Conductance	...	...	...	...	3.5 mA/V
Amplification Factor	...	...	...	...	16

OPERATION AS A FREQUENCY CHANGER

Heptode Anode Voltage	...	...	...	...	250 volts
Heptode Screen Voltage	...	...	...	...	100 volts
Heptode Control Grid Voltage	...	...	...	...	-2 volts
Triode Grid Resistor (g_c connected to g_3)	...	...	...	...	50 kilohms
Triode Grid Current	...	...	...	...	250 μ A
Conversion Conductance	...	...	...	...	850 μ A/V
Heptode Anode Current	...	...	...	...	3.0 mA
Heptode Screen Current	...	...	...	...	3.6 mA

INTER-ELECTRODE CAPACITANCES

R.F. Input (g_{1h} -all)	...	...	...	...	4.5 pF
I.F. Output (a_h -all)	...	...	...	...	8.2 pF
Triode Input	...	...	...	...	2.1 pF
Triode Output	...	...	...	...	0.87 pF
Heptode Grid to Heptode Anode	...	...	...	...	0.034 pF

