

TYPE 342A

WATER COOLED TRIODE

RELEASE NO. 405

APRIL 30, 1945

Filament—Tungsten

Filament voltage.....	20.0 volts, a.c.
Nominal filament current.....	67.0 amperes
Average thermionic emission.....	10.0 amperes

Average Direct Interelectrode Capacitances

Plate to grid.....	27 μ f.
Grid to filament.....	19 μ f.
Plate to filament.....	2.5 μ f.

Average Characteristics at plate voltage of 15,000 and plate current of 1.30 amperes.

Amplification factor.....	40
Plate resistance.....	5860 ohms
Grid to plate transconductance.....	6820 micromhos

Operation**Maximum Ratings**

Max. direct plate voltage.....	20,000 volts
Max. direct plate current.....	2.5 amperes
Max. plate dissipation.....	25,000 watts
Max. grid dissipation.....	400 watts
Max. r-f grid current.....	40 amperes
Max. frequency for the above ratings.....	4 megacycles
Max. plate voltage for upper frequency limit of 16 Mc.....	10,000 volts

Class B Audio Amplifier or Modulator for Balanced 2 Tube Circuit

Direct plate voltage.....	15,000	12,500 volts
Grid bias.....	-200	-160 volts
Direct plate current per tube		
No drive.....	0.40	0.35 ampere
Max. drive.....	1.6	1.6 amperes
Plate dissipation, per tube.....	9,000	7,200 watts
Load resistance, plate-to-plate.....	9,600	7,680 ohms
Load resistance, per tube.....	2,400	1,920 ohms
Approximate maximum output—2 tubes.....	30,000	24,000 watts
Recommended power for driving stage.....	1,000	1,000 watts

Class B Radio-Frequency Amplifier

Direct plate voltage.....	18,000	12,500 volts
Direct plate current for carrier conditions.....	1.4	1.4 amperes
Grid bias.....	-450	-300 volts
Approx. carrier watts for use with 100% modulation	8,500	5,800 watts

Class C Radio-Frequency Oscillator or Power Amplifier—Unmodulated

Direct plate voltage.....	18,000	15,000 volts
Direct plate current.....	2.5	2.5 amperes
Grid bias.....	-675 to -900	-550 to -750 volts
Nominal power output.....	30,000	25,000 watts

Class C Radio-Frequency Amplifier—Plate Modulated

Direct plate voltage.....	12,500	10,000 volts
Direct plate current.....	1.2	1.5 amperes
Grid bias.....	-600	-500 volts
Max. direct grid current.....	250	250 milliamperes
Nominal carrier power output.....	10,000	10,000 watts

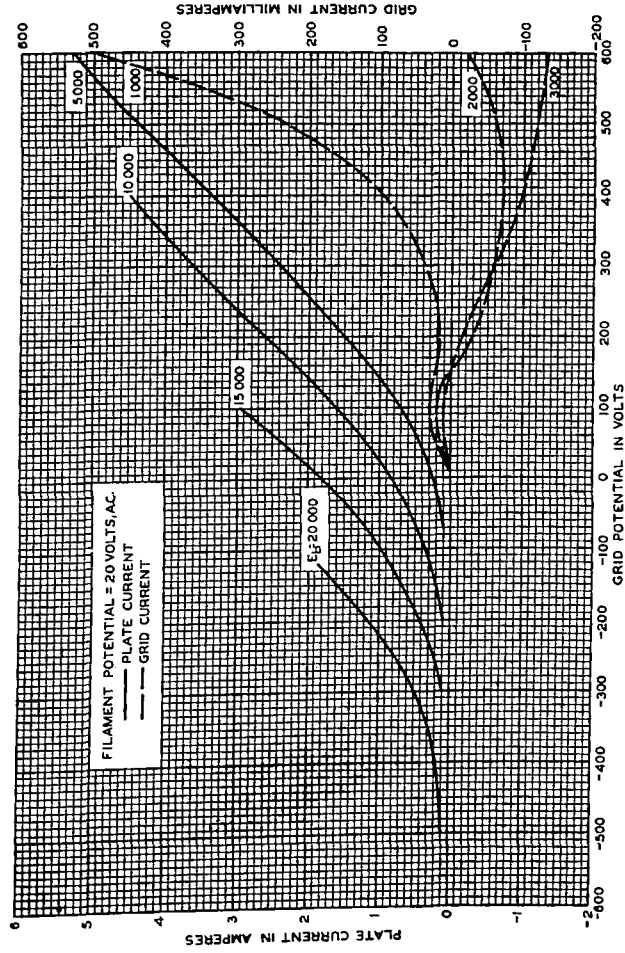


FIG. 2

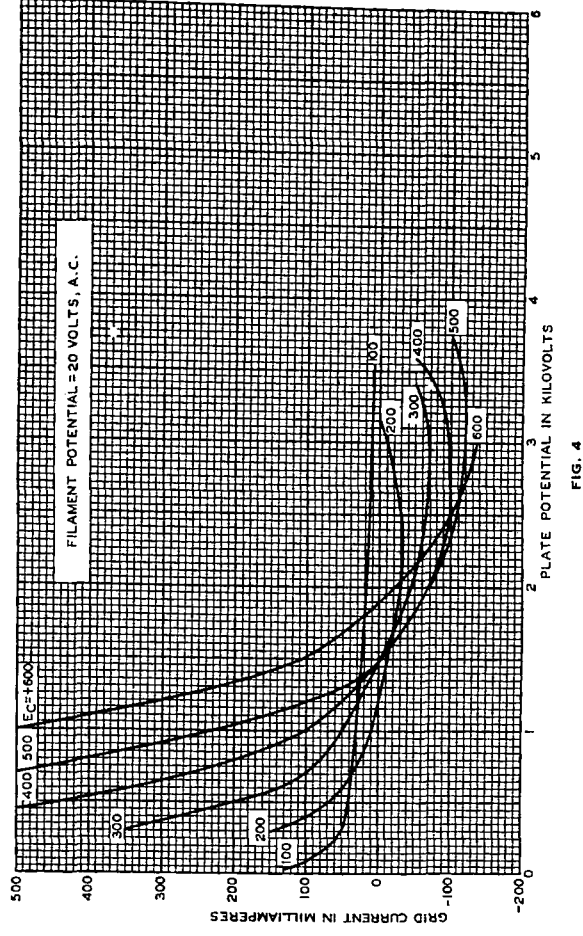


FIG. 4

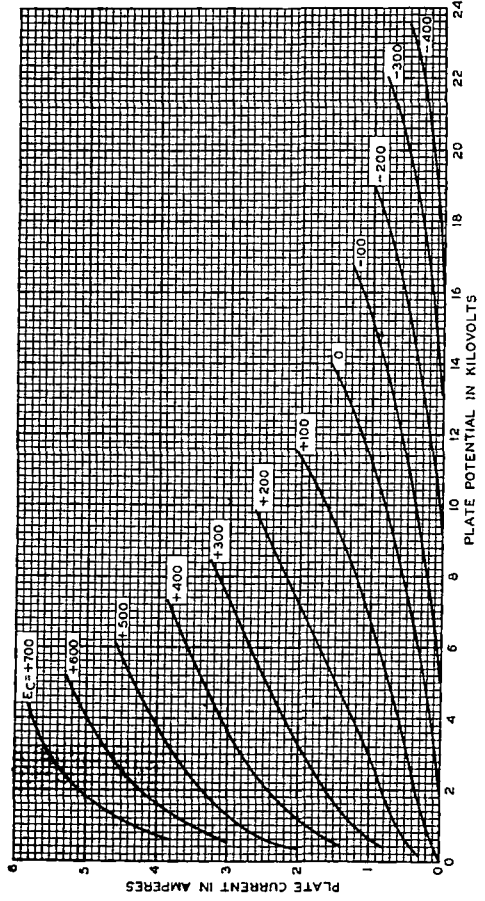


FIG. 3

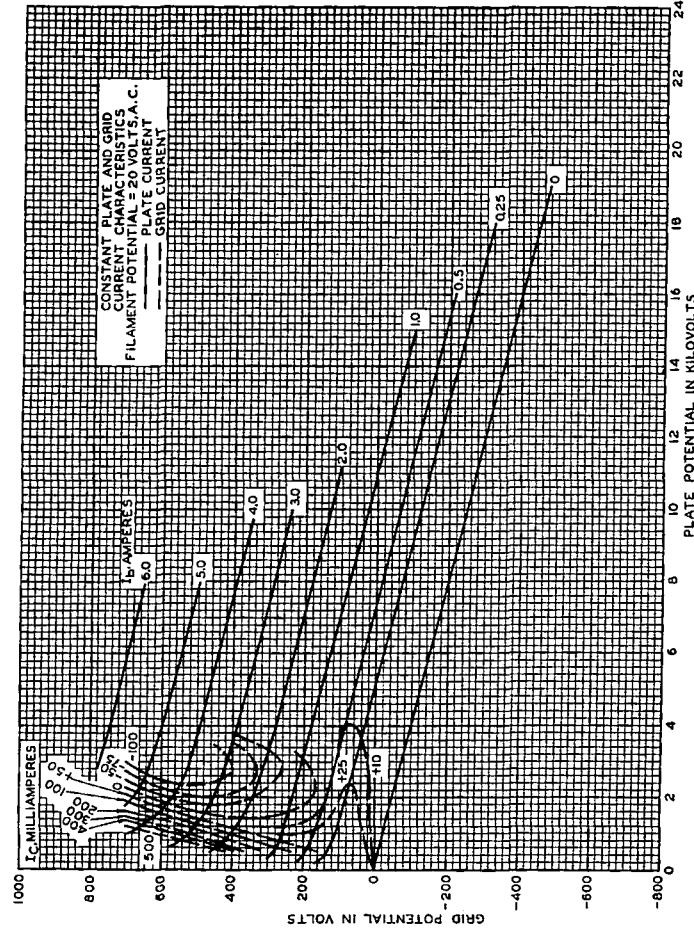


FIG. 5

TYPE 342 A

