Double Ended Water Cooled Triode

4030C

CATHODE.

Tungsten filament		
Nominal voltage (actual voltage marked on bulb)	25	V
Nominal current	248	A
Peak emission	45	A

RATINGS.

Amplification factor	Measured at Va 17.5kV Ia 5A	36	
Impedance		1800	Ω

DIRECT INTER-ELECTRODE CAPACITANCIES

Grid to anode	61	pF
Grid to filament	45	pF
Anode to filament	15	pF

COOLING

(Water Jacket is integral part of the valve)

Nominal water flow	22 gal. per minute
Pressure drop at nominal flow	9 lb. per sq. in.
Maximum water pressure in jacket	35 lb. per sq. in.

DIMENSIONS.

Maximum overall length	1346	mm.
Net weight	16	kg.

MAXIMUM RATINGS.

Maximum direct anode voltage	17.5	kV
Maximum direct anode current	11	A
Maximum anode dissipation	80	kV
Maximum grid dissipation	1.5	kW
Maximum frequency for above ratings	2	Mc/s
Maximum anode voltage for frequency of 22 Mc/s	15	kV

Double Ended Water Cooled Triode

4030C

TYPICAL OPERATING CONDITIONS
AUDIO FREQUENCY

Class B Power Amplifier or Modulator (for balanced 2 valve circuit)

Direct anode voltage	14	kV
Grid bias	−150	V
Direct anode current per valve zero signal	1.3	A
Direct anode current per valve maximum signal	6.5	A
Anode dissipation	41	kW
Load resistance anode to anode	1900	Ω
Maximum output 2 valves	100	kW

RADIO FREQUENCY

Class B Telephony, Modulated Carrier applied to Grid (Carrier conditions per valve for use with 100% modulation)

Direct anode voltage	17.5	15	12	10 kV
Direct anode current	4.8	4.8	4.8	4.8 A
Grid bias	−400	−300	−250	−150 V
Power output	25	22	17	12 kW
Anode dissipation	59	50	40	36 kW
Frequency	2	12	19	22 Mc/s

Class C Power Amplifier, Anode Subject to Modulation (Carrier conditions per valve for use with 100% modulation)

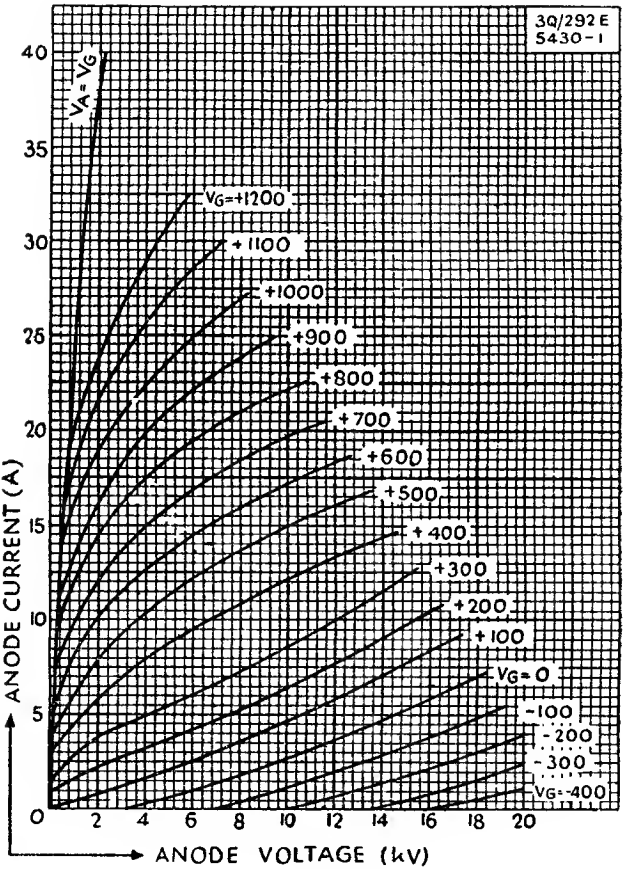
Direct anode voltage	12	11	10	9 kV
Direct anode current	5	5	5	5 A
Grid bias	−600	−500	−450	−400 V
Power output	40	35	30	20 kW
Anode dissipation	20	20	20	25 kW
Frequency	2	12	19	22 Mc/s

Class C Power Amplifier or Oscillator, Unmodulated

Direct anode voltage	17.5	15	12	10 kV
Direct anode current	9.6	9.6	9.6	9.6 A
Grid bias	−600	−500	−450	−400 V
	−700	−600	−500	−400 V
Power output	100	88	68	48 kW
Anode dissipation	68	56	47	48 kW
Frequency	2	12	19	22 Mc/s

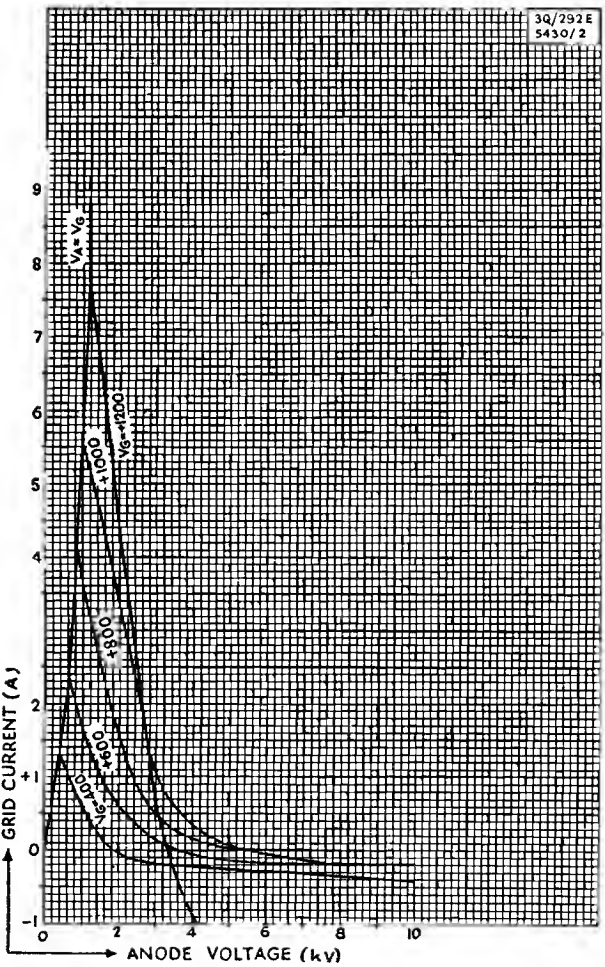
Double Ended Water Cooled Triode

4030C



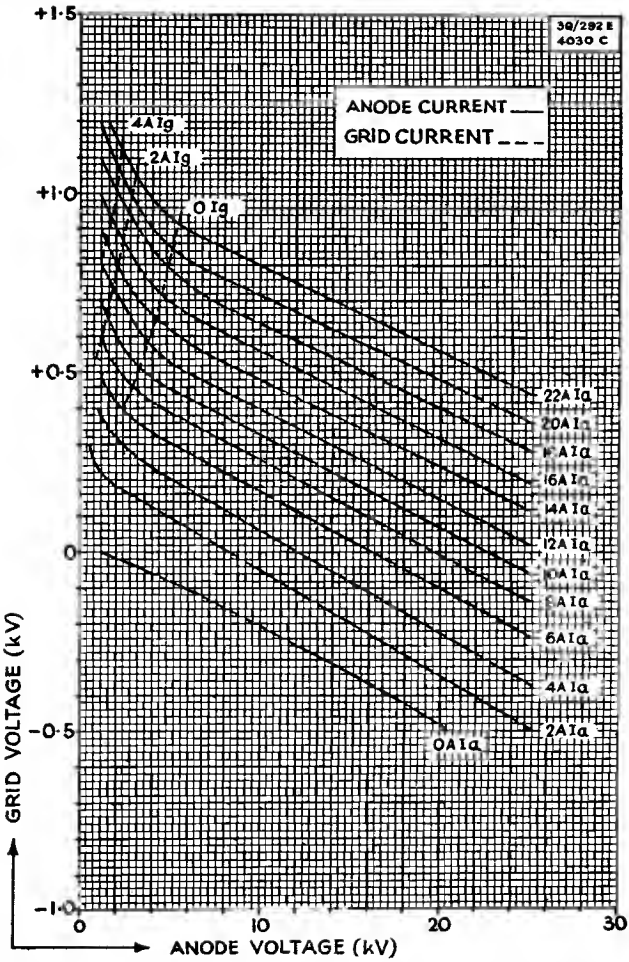
Double Ended Water Cooled Triode

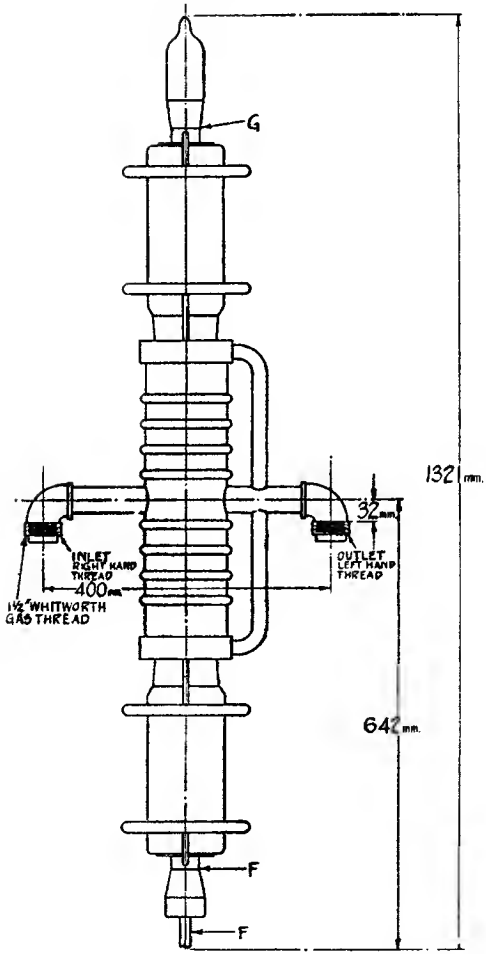
4030C



Double Ended Water Cooled Triode

4030C



Double Ended Water Cooled Triode

4030C