



Water Cooled Triode

4228A

3Q/150E
(4228A)

CATHODE.

Tungsten filament

Voltage (operating voltage marked
on bulb)

Nominal current

Peak emission

22

41

6

V

A

A

RATING.

Amplification factor } Measured at } 18
Impedance } V_a 5 kV I_a 0.75 A } 2,200

Ω

DIRECT INTER-ELECTRODE CAPACITIES.

Grid to anode

Grid to filament

Anode to filament

24

25

3.1

pF

pF

pF

WATER FLOW.

Water jacket type

Nominal water flow

235/LU2A

5

galls./min.

DIMENSIONS.

Maximum overall length

Maximum bulb diameter

Net weight

475

95

1.2

mm.

mm.

kg.

MAXIMUM RATINGS.

Maximum direct anode voltage

Maximum direct anode voltage for
anode modulation

Maximum direct anode current

Maximum anode dissipation

Maximum grid dissipation

Maximum frequency for above rat-
ings

Maximum direct anode voltage for
frequency of 6 Mc/s

6

4

1.5

5

100

3

3

kV

kV

A

kW

W

Mc/s

kV

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TYPICAL OPERATING CONDITIONS. AUDIO FREQUENCY.

Class B Power Amplifier.

(For balanced 2-valve circuit).

Direct anode voltage	5	kV
Grid bias	—265	V
Direct anode current per valve— zero signal	0.15	A
Direct anode current per valve— maximum signal	0.6	A
Load resistance—anode to anode	8,400	Ω
Power output 2 valves	3.75	kW

RADIO FREQUENCY.

Class B Telephony. Modulated Carrier applied to Grid.

(Carrier conditions per valve for use with 100% modulation).

Direct anode voltage	5	kV
Grid bias	—325	V
Direct anode current	0.65	A
Carrier output	1.1 kW approx.	

Class C Power Amplifier. Anode subject to modulation.

(Carrier conditions per valve for use with 100% modulation).

Direct anode voltage	4,000	V
Grid bias	—500	V
Direct anode current	1.25	A
Carrier output	2.5	kW

Class C Power Amplifier or Oscillator, unmodulated.

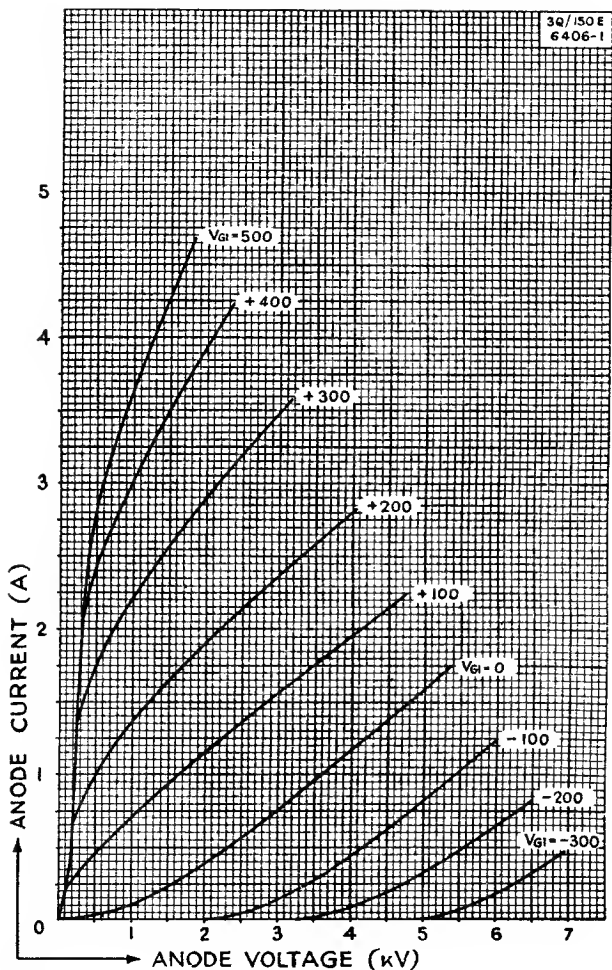
Direct anode voltage	6	kV
Grid bias	—750	V
Direct anode current	1.25	A
Power output	3.4 kW approx.	



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