



Air-Blast-Cooled R.F. Power Amplifier Triode 3J/22IS

CATHODE.

Tungsten filament

Nominal (Actual voltage marked on bulb)	22	V
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Nominal current	70	A
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Peak emission	12	A
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RATING.

Amplification factor	{ Measured at }	26	
Impedance	{ V_a 12kV, I_a 1.5A }	2,900	Ω

DIRECT INTER-ELECTRODE CAPACITIES.

Grid to anode	26	pF
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Grid to filament	1.3	pF
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Anode to filament	20.0	pF
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AIR COOLING.

For dissipation of 10 kW

Volume of air at a pressure of 3in. of water	475	cu. ft./min.
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Maximum temperature of core of cooler	150°	C
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Maximum ambient temperature	45°	C
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DIMENSIONS.

Maximum overall length	506	mm.
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Maximum diameter over cooler	172	mm.
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MAXIMUM RATINGS.

Maximum direct anode voltage	17.5	kV
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Maximum direct anode current	2.5	A
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Maximum anode dissipation	10	kW
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Maximum grid dissipation	1.2	kW
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Maximum frequency for above ratings	22	Mc/s
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**Air-Blast-Cooled R.F.
Power Amplifier
Triode
3J/221S**



TYPICAL OPERATING CONDITIONS

RADIO FREQUENCY

Class B Telephony Modulated Carrier applied to Grid.

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

Direct anode voltage	15	kV
Grid bias	—600	V approx.
Direct anode current	1	A
Power output	5	kW approx.

Class C Power Amplifier Anode subject to modulation.

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

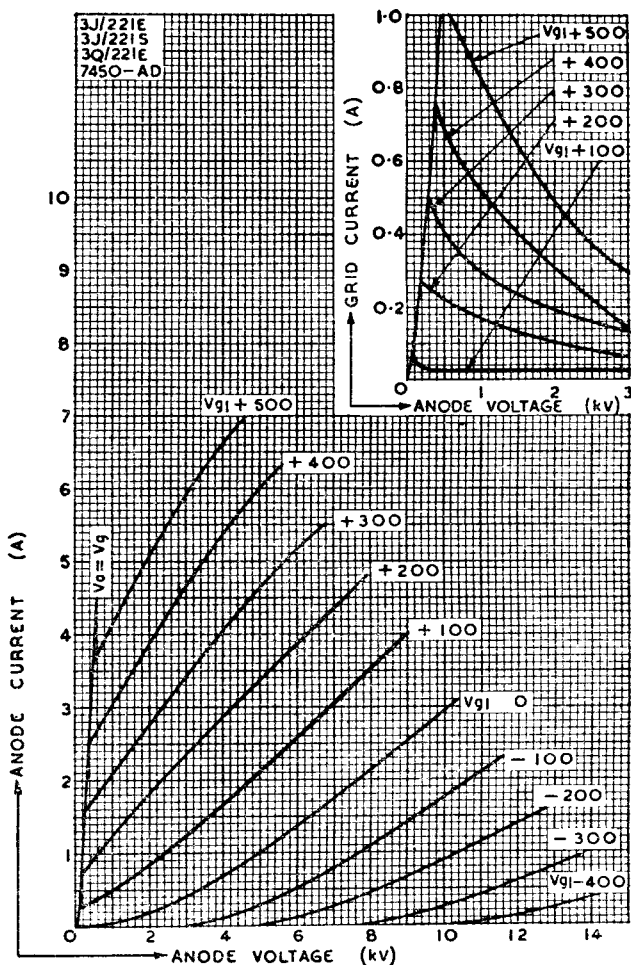
Direct anode voltage	12	kV
Grid bias	—2000	V approx.
Direct anode current	1.25	A
Power output	12	kW approx.

Class C Power Amplifier or Oscillator, unmodulated.

Direct anode voltage	17.5	kV
Grid bias	—1,500	V approx.
Direct anode current	2	A
Power output	25	kW approx.



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