

Transmitting Valve

TYPE A.C.T.9

(Air-Cooled-Anode).



3904

(Approximate overall dimensions : 475 × 190 m/ms.)

A transmitting valve in which the anode forms part of the envelope and is designed for air cooling. In operation air circulation is essential. When used in a suitable circuit as an unmodulated Class C amplifying valve at wavelengths not less than 100 metres, the normal input is 400 milliamperes mean anode current at 10,000 anode volts D.C. At lesser wavelengths the anode voltage must be reduced.

At wavelengths not less than 10 metres, anode volts max. = 5 k.v.

At wavelengths not less than 5 metres, anode volts max. = 4 k.v.

When used under conditions where there is free air circulation the continuous anode dissipation permissible is 800 watts. If assisted air cooling of the anode is employed the continuous anode dissipation may be increased. Where a flow of air at a pressure equal to two to three inches of water is employed for cooling, an anode dissipation of approximately 1.1 k.w. per valve is permissible.

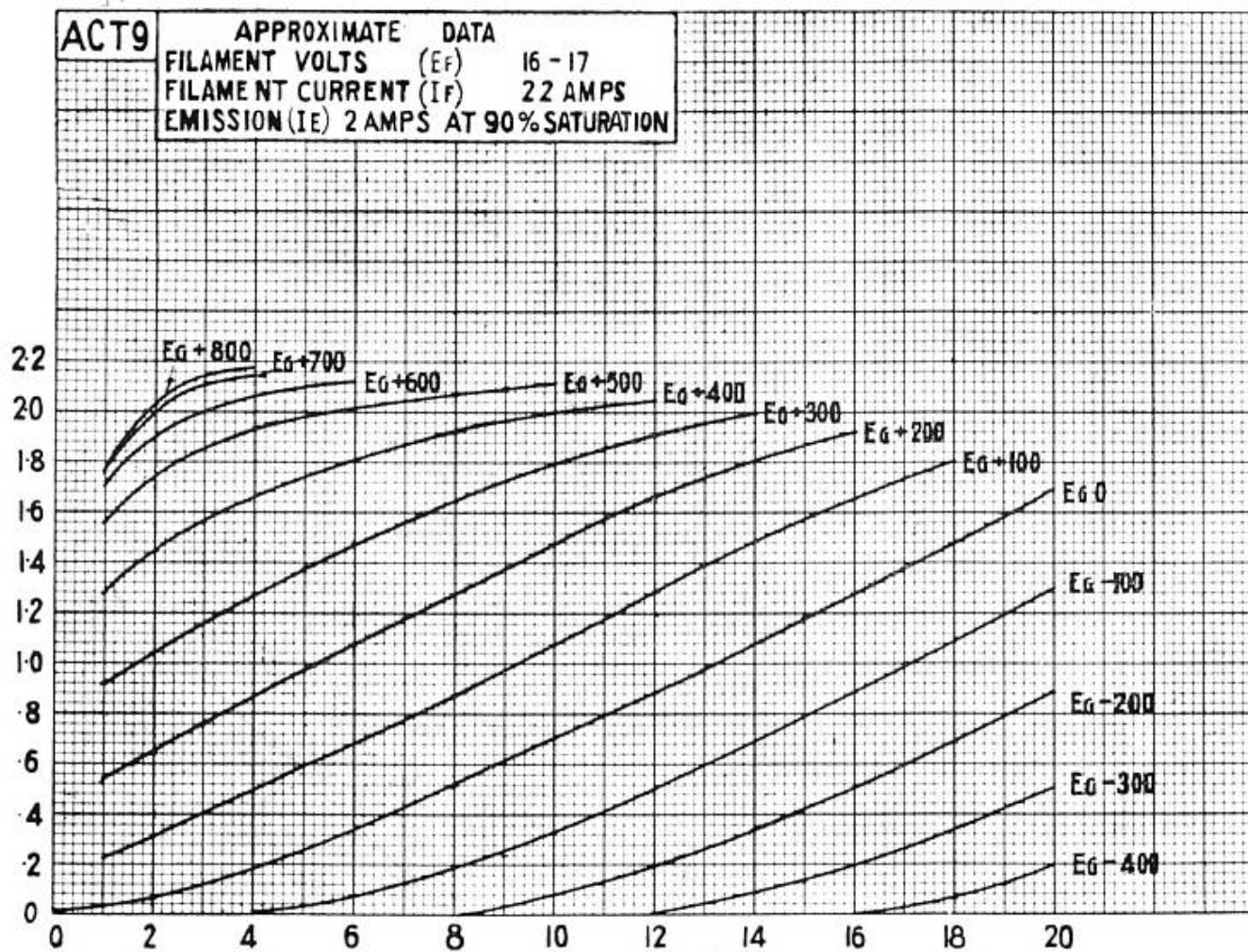
Marked volts. Individual valves are marked with the filament voltage which gives 2.0 amperes emission at 90 per cent. saturation.

Approximate Data :

Filament volts	16-17	Emission amperes at 90 per	
Filament amperes	22	cent. saturation ..	2.0
Anode volts D.C. ..	4,000-10,000	*Amplification factor ..	40
		*Impedance (ohms) ..	13,000

* Taken about anode volts 5,000 and anode current 200 milliamperes.

Anode current in amperes.



3905

Anode potential in kilovolts.

Characteristic Curves of Average Valve.

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