

## ES833

## RADIATION COOLED TRIODE

GENERAL

The ES.833 is a high mu triode particularly suitable for use as an R.F. Power Amplifier, Oscillator or Class B modulator.

The anode and grid connections are brought out at the top and are taken through metal to glass seals to heavy current terminals. As a result of this construction the valve is exceptionally efficient at higher radio frequencies and may be operated under class 'C' CW conditions at a maximum input of 1.8 kW at frequencies up to 30Mc/s, with forced air cooling. At reduced input rating it is possible to operate the valve as high as 75Mc/s.

RATING

Filament Voltage (volts)	$V_f$	10.0
Filament Current (ampe)	$I_f$	10.0
Maximum Anode Voltage (volts)	$V_a(\max)$	3,000
Maximum Anode Dissipation (watts)	$W_a(\max)$	300
Amplification Factor	$\mu$	35
Maximum Operating Frequency at Full Rating		30 Mc/s

- The Maximum Anode Voltage may be increased to 4,000v, and the Anode dissipation to 400w providing the valve is forced-air cooled at a rate of 40 cu.ft./min., on top of bulb between anode and grid seals, directed through a 2" nozzle.

§ At higher frequencies the maximum permissible anode voltages and inputs must be reduced.

INTER-ELECTRODE CAPACITANCES

Anode/Grid ( $\mu\mu\text{F}$ )	$C_{a-g1}$	6.3
Anode/Filament ( $\mu\mu\text{F}$ )	$C_{a-f}$	8.5
Grid/Filament ( $\mu\mu\text{F}$ )	$g1-f$	12.3

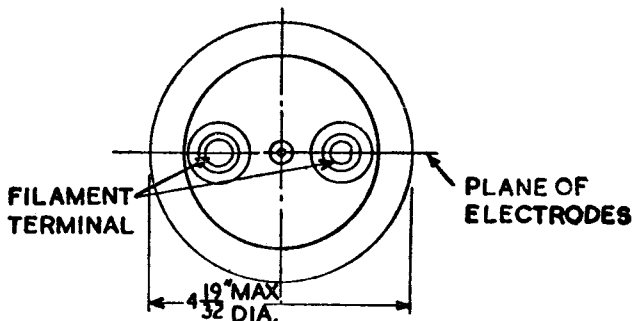
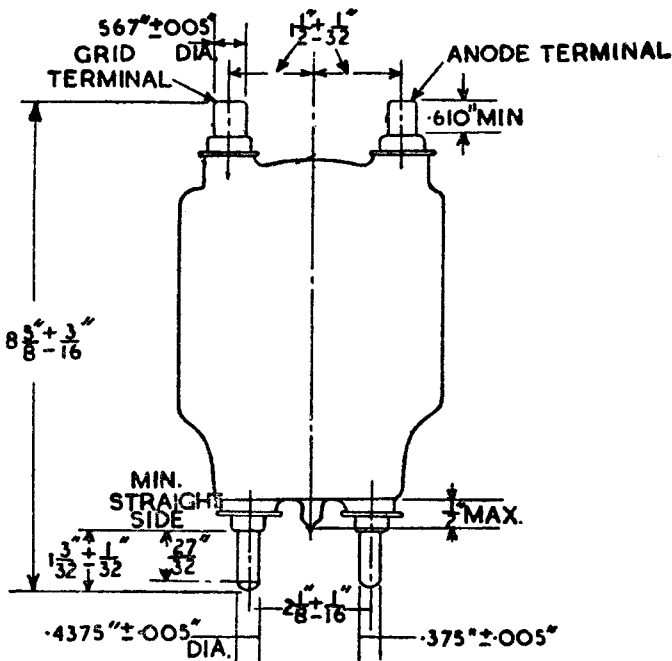
DIMENSIONS

Maximum Overall Length	8.812 ins	: 224 mm
Maximum Diameter	4.594 ins	: 116 mm
Approximate Nett Weight (lbs)		1
Approximate Packed Weight (lbs)		3½

MOUNTING POSITION - Vertical

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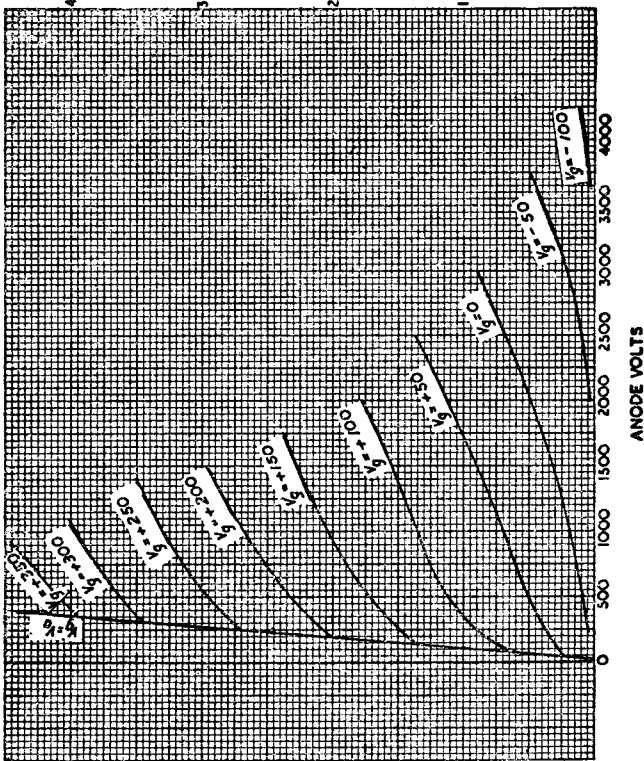


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RADIATION COOLED TRIODE

AVERAGE CHARACTERISTIC CURVES

ANODE CURRENT IN AMPS



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AVERAGE CHARACTERISTIC CURVES :  $I_g/V_a$

