

R.F. POWER TRIODE

TYS5-2000

R.F. power triode in silica envelope, rated for a continuous anode dissipation of 2.0kW. Primarily intended as a self-excited oscillator in r.f. heating equipment, but also suitable for use as an r.f. amplifier in transmitting or industrial equipment.

This data should be read in conjunction with GENERAL OPERATIONAL RECOMMENDATIONS – TRANSMITTING VALVES which precede this section of the handbook.

FILAMENT

Thoriated tungsten, suitable for a.c. or d.c. operation.

V_f	14.5	V
I_f	26	A

MOUNTING POSITION

Vertical, filament leads downwards

CAPACITANCES

C_{a-g}	35	pF
C_{a-f}	4.0	pF
C_{g-f}	20	pF

CHARACTERISTICS (measured at $V_a = 5.0kV$, $I_a = 500mA$)

g_m	10	mA/V
μ	30	
r_a	3.0	k Ω

LIMITING VALUES (absolute ratings)

V_a max.	5.0	kV
p_a max. (continuous)	2.0	kW
* p_a max. (intermittent overload)	2.5	kW
I_g max.	250	mA
I_k max.	2.0	A
Max. frequency at above ratings	20	Mc/s
Max. operating frequency	30	Mc/s

*The intermittent overload anode dissipation must in no circumstances exceed a period of 2 min. and the average anode dissipation over the duty cycle must not exceed the continuous rating.

OPERATING CONDITIONS AS CLASS "C" SELF-EXCITED OSCILLATOR AT 3Mc/s

V_a	5.0	kV
V_g	-475	V
I_a	1.65	A
I_g	240	mA
$V_{drive-peak}$	975	V
P_{out}	6.2	kW
η	75	%

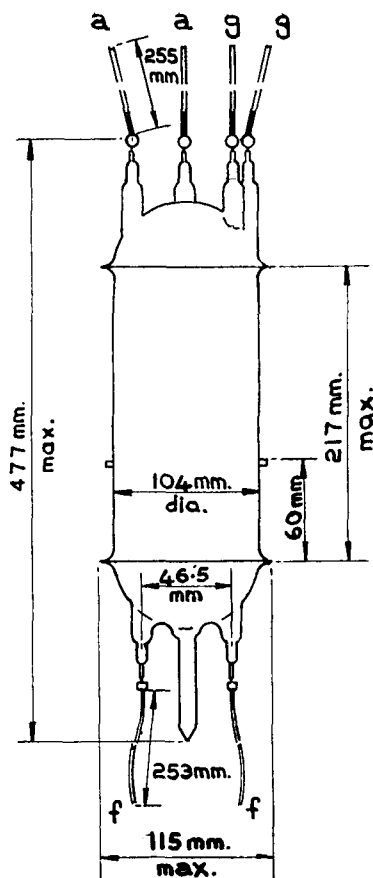
WEIGHT

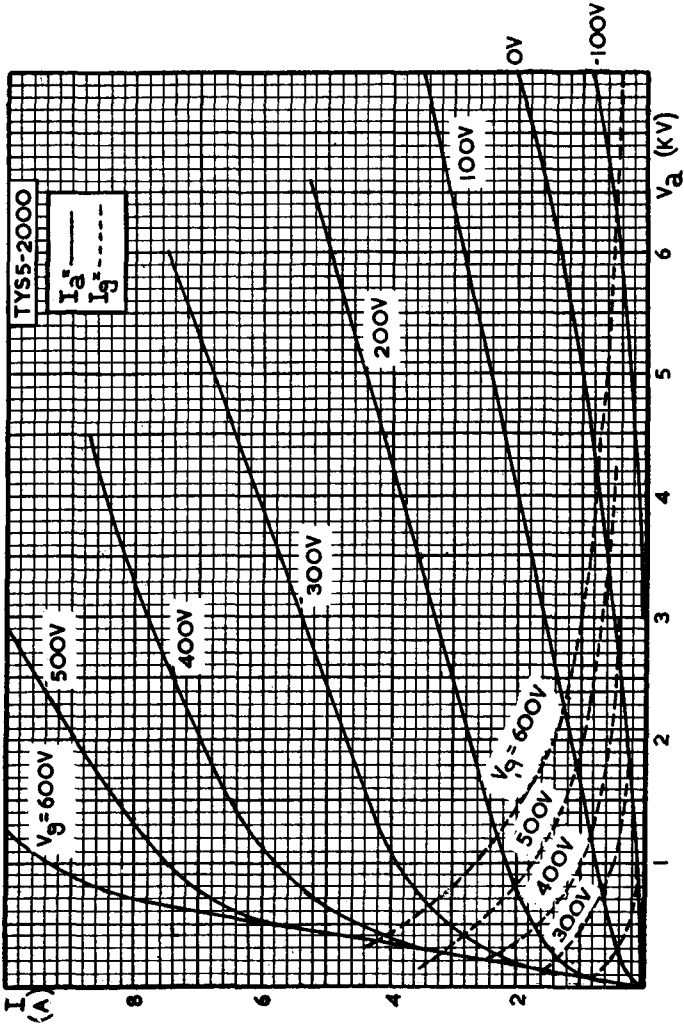
Valve only

2 lb	4 oz
1.02	kg

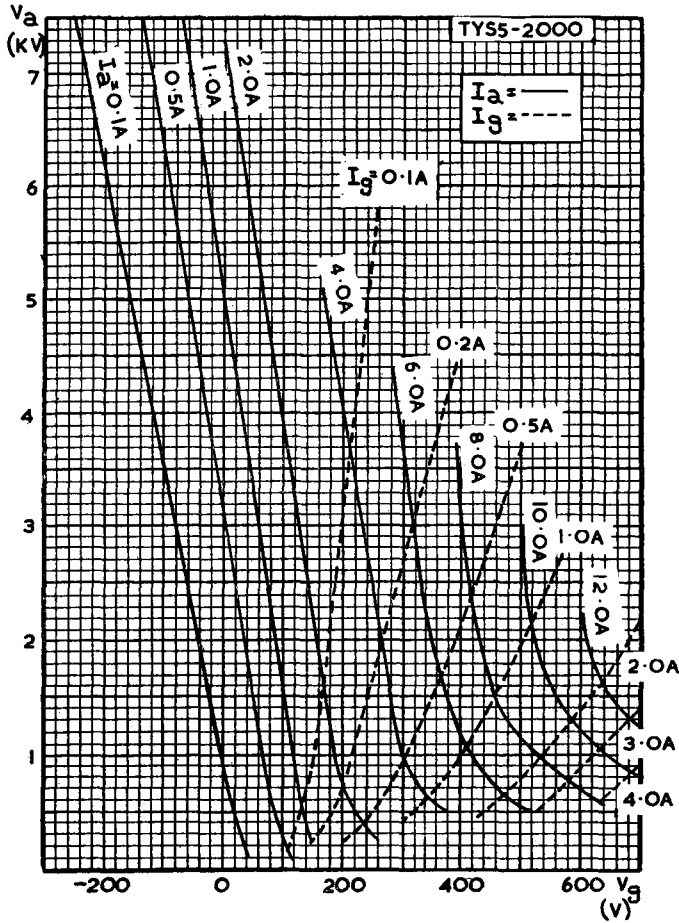
TYS5-2000

R.F. POWER TRIODE





ANODE AND GRID CURRENTS PLOTTED AGAINST ANODE VOLTAGE
WITH CONTROL-GRID VOLTAGE AS PARAMETER



CONSTANT CURRENT CURVES

