



Twin Tetrode Type C144

HF POWER AMPLIFIER

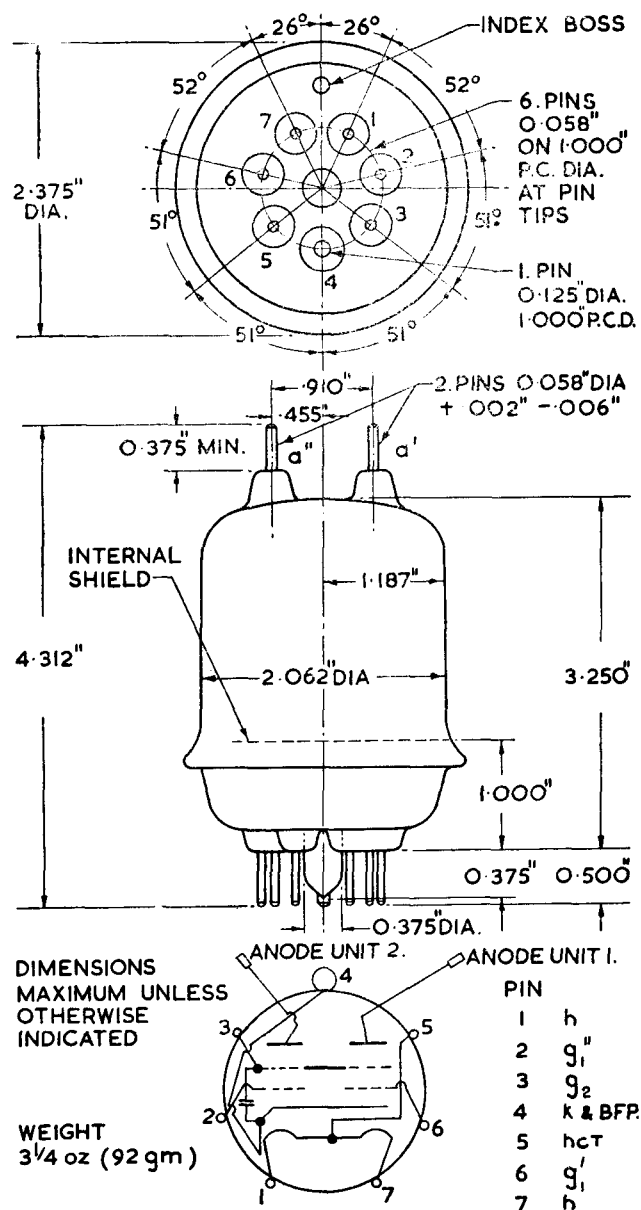
General. A push-pull beam tetrode fitted with an indirectly heated cathode, suitable for use as an HF power amplifier at frequencies up to 200 Mc/s.

Cooling. Forced air cooling is recommended to keep the bulb temperature below 175°C.

APPROXIMATE DATA

Unless otherwise stated values are for both units

	Series	Parallel
V_f	12.6	6.3 V
I_f	1.125	2.25 A
V_a (max)		750 V
V_{g2} (max)		225 V
p_a (max)		40 W
μ_{g1-g2}	{ Per unit taken at I_a 60 mA }	{ 8.5 mA/V 9 }
g_m		
c_{g1-a} (with external shielding)		0.12 pF
C_{in}		14.5 pF
C_{out}		7.0 pF
c_{g2-k} (including internal screen by-pass condenser)		65 pF (approx.)



BASE B7A (SEPTAR)

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APPLICATION DATA

PUSH-PULL RF POWER AMPLIFIER AND OSCILLATOR, CLASS C TELEGRAPHY

(One valve, unmodulated, key down conditions)

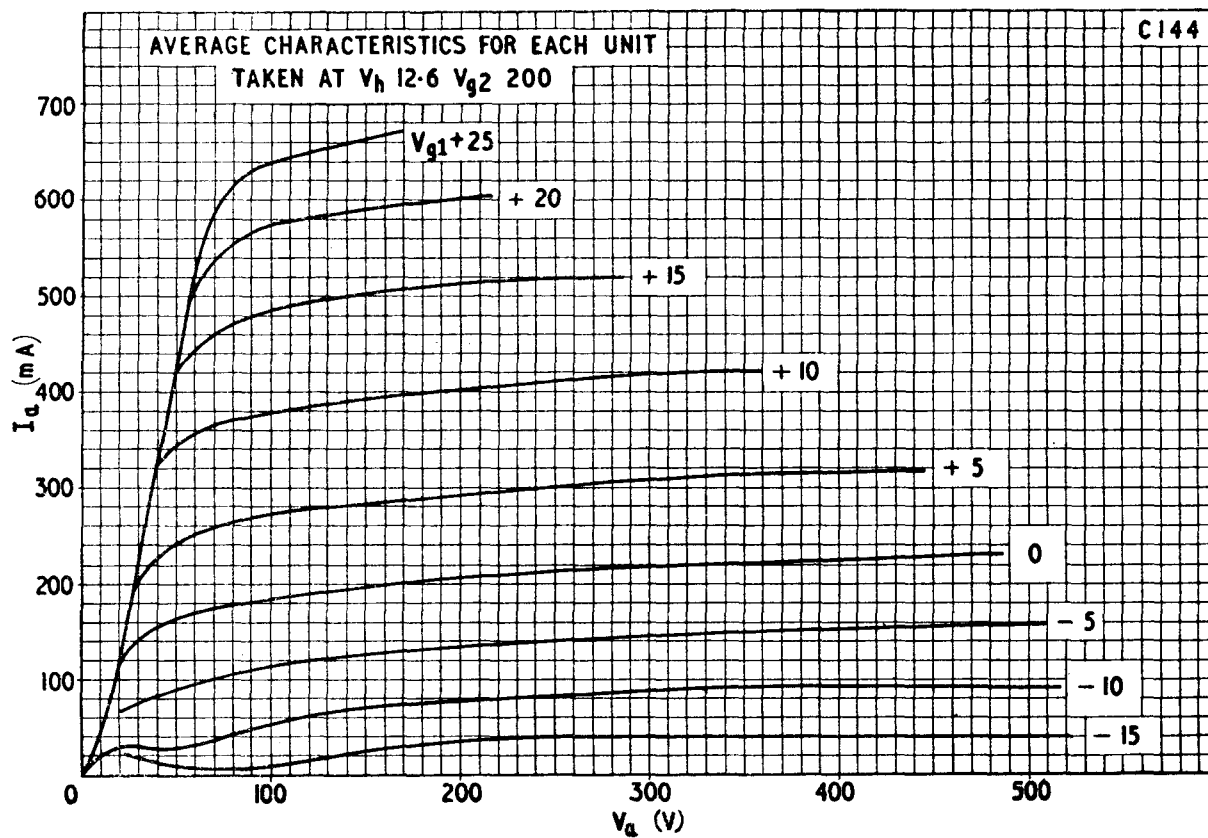
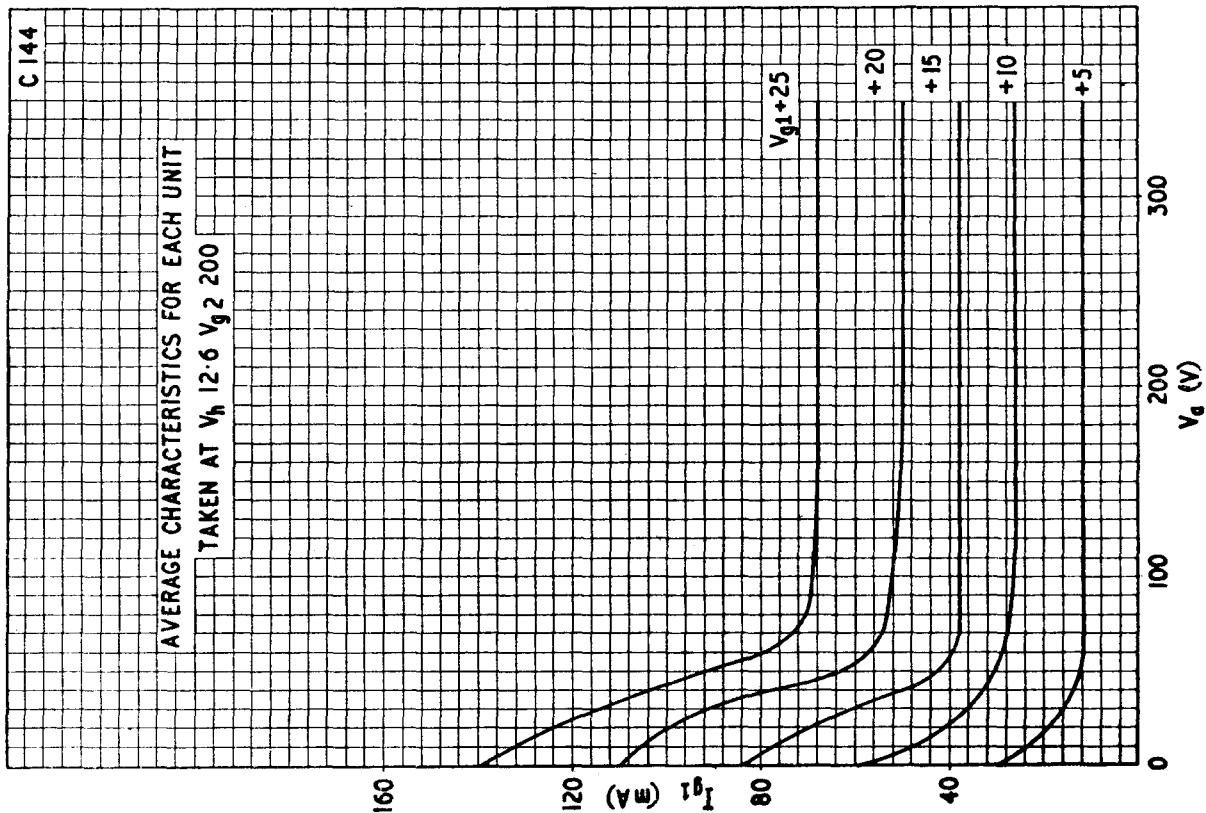
Maximum permissible ratings (a)

V_a	750	V
V_{g2}	225	V
V_{g1}	-175	V
I_a	240	mA
I_{g1}	15	mA
P_{in}	120	W
p_{g2}	7	W
p_a	40	W
Typical Operation		
V_a	500	750 V
I_a	240	160 mA

V_{g2}	from a fixed supply of	200	200	V
	via R_{g1}	9,300	18,300	Ω
I_{g2}		32	30	mA
V_{g1}	from a fixed supply of	-45	-55	V
	via R_k	160	270	Ω
	via R_{g1}	(b) 3,750	4,600	Ω
I_{g1}	(c)	12	12	mA
$V_{g1}' - g1''$	(pk)	124	140	V
P_{dr}	(c)	0.7	0.8	W
P_{out}	(c)	83	87	W

NOTES

- Modulation essentially negative may be used if the positive peak of the audio frequency envelope does not exceed 115% of the carrier conditions.
- The grid circuit resistance should never exceed 15,000 Ω (total) per valve, or 30,000 Ω per unit. If additional bias is necessary, a cathode resistor or a fixed supply should be used.
- Subject to wide variation. The figures given are approximate only.





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