NOTES RELATING TO E. M. I. SUMMARY OPPOSITE.

Note 1. Klystrons with internal cavity, (Int. Cav.), have whole of cavity within vacuum envelope. Power is taken out either by a waveguide window, or by co-axial line (co-ax line). Tubes with external cavity (Ext. Cav.) detailed on this sheet are metal-glass tubes having the central part of the cavity within the vacuum envelope. The external cavity is connected to the copper electrodes either by spring contacts, as with plug-in types, (e.g. R5222), when a suffix P is added, or by solder. In most cases, the tube thus soldered into a cavity is of rugged construction, indicated by suffix R.

Note 2. In tuners having shaft drive, rotation of the shaft transmits movement via a built-in reduction mechanism, (e g. a differential screw as with type R6010).

Micro. indicates a micrometer tuner, with scale.

Single screw tuners are of the " puller " type, in which tuning of an auxiliary cavity pulls the frequency of the main cavity.

Pre-set slugs are threaded slugs around the periphery of the cavity, movement of which effectively vary the cavity volume.

Note 3. Octal—International octal.

B7G —Miniature 7 pin glass base without spigot.

B8G —8 pin glass base, with spigot.

Pee-wee 4 pin—Overcapped 4 pin base.

Note 4. Plug-in Klystrons, as R5222, may be used in variety of external cavities, and properties, e.g. $\triangle$ F, will depend critically on the cavity design.

Note 5. V_R refers to reflector voltage of reflex klystrons; this is always negative with respect to cathode.

Note 6. $\triangle$ F is the electronic tuning range between half power points in the case of reflex klystrons, and is the 3db bandwidth for amplifier tubes.

Note 7. Waveguide outputs are into guide of specified WG number. Flanges are of various types.

TYPE : E.M.I.

SUMMARY OF E.M.I. KLYSTRONS AND CAVITIES.

NUMBER	TYPE (Note 1)	TUNER (Note 2)	BASE (Note 3)	FREQUENCY RANGE kMc/s.	AVERAGE CHARACTERISTICS						RATINGS					
					FRQ'Y kMc/s.	V_a Volts	I_a mA	V_s Volts (Note 5)	POWER mW	ΔF Mc/s (Note 6)	V_H Volts Nominal	I_H Amps Nominal	V_a Volts Max.	I_a mA Max.	OUTPUT (Note 7)
R9604	Reflex Int. Cav.	Shaft	Octal	36·6–46·1	41·0	2,000	12	—300	60	60	6·3	0·8	2,200	15	WG22
R9555	"	"	"	37·5–43	40	2,000	12	—300	30	60	6·3	0·8	2,200	15	WG22
R9521	"	"	"	35 –40	37·5	2,000	12	—300	40	60	6·3	0·8	2,200	15	WG22
R9546	"	"	"	32 –37.5	35	2,000	12	—300	40	60	6·3	0·8	2,200	15	WG22
R5146, VX5023	"	"	"	34 –36.5	34·7	2,000	10	—300	60	60	6·3	0·8	2,200	12	WG22
R9518	"	"	"	27·8–32·2	30	2,000	12	—300	60	60	6·3	0·8	2,200	15	WG22
R9547	"	"	"	24 –27·8	26	2,000	12	—300	60	60	6·3	0·8	2,200	15	WG22
R9602	"	"	"	22·0–26·0	24·0	2,000	12	—300	60	60	6·3	0·8	2,200	15	WG20
R9621	"	"	"	20·0–24·0	22·0	2,000	12	—300	60	60	6·3	0·8	2,200	15	WG20
R9622	"	"	"	18·0–22·5	20·0	2,000	12	—300	60	60	6·3	0·8	2,200	15	WG20
25182 + R9562	Reflex P Ext. Cav.	Micro	Special	8·2–11·7	10	350	40	—350	130	20	6·3	0·7 or 1·2	370	55	WG16
25157 + R9525	"	"	"	7·0–10·3	8·5	350	40	—270	200	20	6·3	"	370	55	WG15
25181 + R9561	"	"	"	5·4– 8·2	6·5	350	40	—300	150	20	6·3	"	370	55	WG15
25181A & R9561A	"	"	"	5·0– 5·9	5·5	350	40	—250	50	20	6·3	1·2	370	55	WG12
R5222 CV2346 (Note 4)	Plug-in Reflex	—	"	5 –11·7	Over range	350	40	—50 to —500	30 to 200	—	6·3	0·7	370	55	—
R9561	Modified R5222	To fit wide range cavities type 25181													
R9562	"	To fit wide range cavities type 25182													
R9525	"	To fit wide range cavities type 25157													
R9501	"	Increased ΔF at 9·2 kMc/s in $\frac{3\lambda}{4}$ Cavity				300	30	—200	35	30	6·3	0·7	370	55	WG16
R9538*	Reflex R Ext. Cav.	Single Screw	Special	9·1– 9·3	9·2	350	40	—210	60	20	6·3	1·2	370	55	WG16
R9539*	"	"	"	9·3– 9·5	9·4	350	40	—220	60	20	6·3	1·2	370	55	WG16
R9540*	"	"	"	9·5– 9·7	9·6	350	40	—230	60	20	6·3	1·2	370	55	WG16
R9541*	"	"	"	9·7– 9·9	9·8	350	40	—240	60	20	6·3	1·2	370	55	WG16
R9542*	"	"	"	9·9–10·1	10	350	40	—250	60	20	6·3	1·2	370	55	WG16
R9543*	"	"	"	300 Mc/s within 10·1–10·6	10·3	350	40	—260	60	20	6·3	1·2	370	55	WG16
R9544*	"	"	"	300 Mc/s within 10·6–11	10·8	350	40	—300	45	20	6·3	1·2	370	55	WG16
KRN3/1 CV217	Reflex Ext. Cav.	Shaft	Octal	9·55–9·9	9·7	1,350	8	—250	25	25	4·0	1·3	1,500	10	WG16
R9516	Reflex Int. Cav.	"	B8G	7.05–7.3	7·2	1,000 800	120 80	—300 —300	2·2W 1·0W	60 40	12·6	1·1	1,200	140	WG14
R9537	Selected R5222 for operation in calibrated cavity of 7·1 kMc/s mid frequency														
25212+ R9599	Reflex P Ext. Cav.	Micro	Pee Wee 4-pin	3·95– 5·5	4·7	350	35	—500	80	25	6·3	1·2	370	55	WG12
R9599	Modified R9559	To fit wide range cavities type 25212													
R6010 CV2353	Reflex Int. Cav.	Shaft	B8G	4·4– 4·8	4·6	750	143	—290	3·7W	50	6·3	0·9	800	150	Co-ax line
R6015 CV2354	"	"	"	4·27–4·76	4·5	250	40	—175	150	20	6·3	0·9	350	70	"
25221+ R9559	Reflex P Ext. Cav.	Micro	Pee Wee 4-pin	3·3– 4·9	4·1	350	35	—400	80	25	6·3	1·2	370	55	WG11
R5081	Reflex Int. Cav.	Shaft	B8G	3·9– 4·2	4·0	750	143	—350	4·0W	40	6·3	0·9	800	150	Co-ax line
RK6112 CV2116	Plug-in Reflex	—	B7G	1 – 4	Over range	250	26	—50 to —400	150	—	6·3	0·7	300	45	—
R9559 VX5048	"	—	Pee-Wee 4 pin	1 – 5·4 (Tentative)	"	300	35	"	100	—	6·3	1·2	370	55	—
R9585 6BM6 CV3615	"	—	"	0·5– 3	"	300	20	—20 to —400	10 to 50	—	6·3	0·7	350	32	—
R9586 6BM6A CV3939	"	—	"	0·5– 3			As R9585 but selected for absence of jitter when pulsed.								
†25205 + R9559	Reflex P Ext. Cav.	Shaft, with Vernier	"	3·28–3·72	3·5	300	35	—200	120	30	6·3	1·2	370	55	WG11
KR6/1 CV116	Reflex Ext. Cav.	Pre-set slugs	Octal	3·36–3·55	3·45	250	32	—140	150	30	4·0	1·3	300	40	Co-ax line
KR6/2 CV237	"	"	"	3·17–3·39	3·28	250	32	—140	150	30	4·0	1·3	300	40	"
KR6/3 CV238	"	"	"	2·93–3·13	3·03	250	32	—140	150	30	4·0	1·3	300	40	"
R9570 VX5063	3 cavity amplifier (pulse)	Special	Special	2·7–3·05	Over range	45kV Duty cycle ·002	9A	—	100kW for 6W Input	5	9–11	6·5–8	50kV Duty cycle ·0012	11·8A	WG10
R9571 VX5089	4 cavity amplifier (pulse)			2·7–3·05		20kV Duty cycle ·005	6·5A		15kW for 2W Input	30	9–11	6·5–8	25kV Duty cycle ·0034	8·8A	WG10

* Cavities of similar type fitted with contact springs and suitable for use with plug-in Klystron R5222 are also available, these have suffix P. Fixed frequency versions of these tubes are identified by suffix N (e.g. 9540N would be 9·6 kMc/s fixed frequency rugged tube) and are available within band. Fixed frequency plug-in cavities (e.g. 9540NP) are also available.
† Other cavities of tuning range 400 Mc/s in band 2·5 to 4·2 kMc/s are also available (Types 25203, 4 and 6).

(The Company reserves the right to make changes without prior notice.)