

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. ΔF , 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. ΔF 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.	FRQ'Y kMc/s.	AVERAGE CHARACTERISTICS					RATINGS				OUTPUT (Note 7)	
						V _a Volts	I _a mA	V _c Volts (Note 5)	POWER mW	ΔF Mc/s (Note 6)	V _a Volts Nominal	I _a Amps	V _a Volts Max.	I _a mA Max.		
R9604	Reflex Int. Cav.	Shaft	Octal	36-46.1	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 3A Cavity														
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	
RS081	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	Over range	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.)