



Characteristics of

**sylvania
transmitting
tubes**

SYLVANIA

SYLVANIA ELECTRIC PRODUCTS INC.
1740 BROADWAY, NEW YORK 19, N. Y.



SYLVANIA TRANSMITTING TUBE CHARACTERISTICS CHART

NOTICE:

The data published here have been compiled from various sources and while believed to be accurate, no responsibility can be assumed in case of error.

The types listed here are generally available through Sylvania distributors who should be consulted for the latest information on availability and prices.

HOW TO USE THIS CHART

The types included here comprise those most commonly used in amateur and small commercial transmitters. Since these types are usually rated for more than one type of service they have been arranged first by type of service and then numerically. This will assist anyone seeking the ratings or the best tube for a given service.

The information is given in the same form as in our well-known Receiving Tube Chart with the necessary modifications of column heads to give the characteristics required for the type and service. Capacitance values given are unshielded unless otherwise specified.

LICENSE NOTICE

Mention or reference to patented circuits does not constitute permission for their use. The license agreement under which Sylvania tubes are sold is enclosed in the tube carton.

A TECHNICAL PUBLICATION OF

SYLVANIA

SYLVANIA ELECTRIC PRODUCTS INC.
1740 BROADWAY, NEW YORK 19, N. Y.

A-F POWER AMPLIFIER AND MODULATOR — CLASS B

TYPE	CONSTRUCTION			EMITTER			CAPACITANCES			USE	MAXIMUM RATINGS		TYPICAL OPERATION										TYPE
	Style	Class	Base	Type	Volts	Amps	Cap	Cin	Cout		Watts Plate Dissipation	Ma. Plate Current	Plate Volts	Screen Volts	Negative Grid Volts	Suppressor Volts	Ma. Plate Current	Ma. Screen Current	P. to P. Load In Ohms	Watts Driving Power	Watts Power Output		
801-A/801*	ST-16	Triode	4-D	Thor. Fil.	7.5	1.25	6.0	4.5	1.5	CCS	20	70	400	.....	50	.....	130	.....	6000	3	27	801-A/801*
													500	.....	60	.....	130	.....	8000	3	36	
													600	.....	75	.....	130	.....	10,000	3	45	
805*	T-18	Triode	3-N	Thor. Fil.	10.0	3.25	6.5	8.5	10.5	CCS	125	210	1250	.....	0	.....	400	.....	6700	6	300	805*
													1500	.....	16	.....	400	.....	8200	7	370	
													1250	.....	16.5	.....	230	.....	12,700	7.8	190	
													1500	.....	22.5	.....	190	.....	18,300	4.8	185	
808*	G-22	Triode	2-D	Thor. Fil.	7.5	4.0	2.8	5.3	0.95	CCS	50	150	1500	.....	36.0	.....	220	.....	21,400	8.8	300	808*
													2000	.....	4.5	.....	200	.....	8400	2.5	105	
													750	.....	0	.....	250	.....	6200	3.4	120	
809*	ST-19	Triode	3-G	Thor. Fil.	6.3	2.5	6.7	5.7	0.9	CCS	25	125	700	.....	9	.....	200	.....	11,600	2.7	145	809*
													1000	.....	50	.....	420	.....	11,000	10	590	
													2000	.....	60	.....	450	.....	11,600	13	725	
810*	T-20	Triode	2-N	Thor. Fil.	10.0	4.5	4.8	8.7	12.0	CCS	125	250	1350	.....	0	.....	200	.....	14,400	2.6	175	810*
													1350	.....	0	.....	240	.....	12,000	3.4	210	
													1500	.....	9	.....	200	.....	17,600	3.0	220	
811*	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.5	5.5	0.6	CCS	40	150	1250	.....	0	.....	200	.....	14,400	2.6	175	811*
													1250	.....	0	.....	240	.....	12,000	3.4	210	
													1500	.....	9	.....	200	.....	17,600	3.0	220	
811-A*	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.6	5.9	0.7	CCS	45	175	750	.....	0	.....	350	.....	5100	9.7	178	811-A*
													1250	.....	0	.....	260	.....	12,400	3.8	235	
													1000	.....	0	.....	350	.....	7400	7.5	248	
													1250	.....	0	.....	350	.....	9200	6.0	310	
													1500	.....	4.5	.....	313	.....	12,400	4.4	340	
812*	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.3	5.3	0.8	CCS	40	150	1250	.....	36	.....	200	.....	15,000	4.3	175	812*
													1500	.....	45	.....	200	.....	18,000	4.7	225	
													1500	.....	40	.....	260	.....	12,200	3.5	235	
812-A*	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.5	5.4	0.77	CCS	45	175	1250	.....	48	.....	310	.....	13,200	5.0	340	812-A*
													1500	.....	5.	.....	7.	.....	5200	3.2	21	
841*	S-17	Triode	4-D	Thor. Fil.	7.5	1.25	7.	4.	3.	CCS	15	60	425	.....	5.	.....	13.	.....	7000	3.6	28	841*
													1250	.....	55.	.....	320	.....	8000	4.0	250	
8005*	ST-19	Triode	3-G	Thor. Fil.	10.0	3.25	5.0	6.4	1.0	ICAS	85	200	1500	.....	67.5	.....	330	.....	9800	5.5	330	8005*

*Typical operation values are for 2 tubes.

A-F POWER AMPLIFIER AND MODULATOR — CLASS AB₂

TYPE	CONSTRUCTION			EMITTER			CAPACITANCES			USE	MAXIMUM RATINGS			TYPICAL OPERATION										TYPE
	Style	Class	Base	Type	Volts	Amps	Cgp	Cin	Cout		Watts Plate Dissipation	Ma. Plate Current	Screen Volts	Suppressor Volts	Ma. Plate Current°	Ma. Screen Current°	P-P Load in Ohms	Watts Driving Power	Watts Power Output					
																				Ma. Plate Current	Negative Grid Volts	Ma. Plate Current	Ma. Screen Current	
807*	ST-16	Beam Amp.	5-AW	Cathode	6.3	0.9	0.2m	12.0	7.0	CCS	25	300	.....	240	10	3200	0.2	55					
	T-12											300	.....	240	10	4240	0.2	75					
5933/807W	T-16	Beam Amp.	5-BA	Ther. Fil.	10.0	5.0	0.95m	16.3	14.0	CCS	30	300	.....	200	10	6400	0.1	80					
	T-20									ICAS	30	300	.....	240	10	6950	0.2	120					
813*	T-16	Duo Beam Amplifier	8-BY	Cathode	12.6	0.8	0.9m	14	8.5	CCS	100	2000	0	315	58	16,000	0.10	455						
	ST-16	Beam Amp.	5-AZ	Cathode	12.6	0.45	0.9m	11	7	CCS	125	2250	0	315	58	18,500	0.10	515						
1625*	T-16	Beam Amp.	8-BY	Cathode	12.6	0.8	0.9m	14	8.5	CCS	125	2500	0	360	55	17,000	0.35	650						
	ST-16	Beam Amp.	5-AZ	Cathode	12.6	0.45	0.9m	11	7	CCS	25	400	.....	150	32	6500	0.36	48					
2E94*	T-9	Beam Amp.	7-CL	Coated Fil.	6.3	0.65	0.11m	8.5	6.5	CCS	25	500	.....	150	32	8000	0.36	54					
	T-9	Beam Amp.	7-CK	Cathode	6.3	0.8	0.20m	13	7	CCS	10	400	.....	150	26	7000	0.43	42					
2E36□	T-9	Beam Amp.	7-CQ	Filament	6.0	0.65	0.9	9.5	6.6	CCS	13.5	400	.....	150	28	9000	0.46	54					
	T-5½	Beam Amp.	7-CQ	Filament	6.0	0.65	0.9	9.5	6.6	CCS	20	400	.....	150	32	6200	0.36	48					
2E30*	T-16	Beam Amp.	5-AW	Cathode	6.3	0.9	0.2m	12.0	7.0	CCS	25	500	.....	150	32	8000	0.36	54					
	ST-16	Beam Amp.	5-AW	Cathode	6.3	0.9	0.2m	12.0	7.0	CCS	10	180	.....	100	16	2500	0.23	7.4					
807*	T-16	Beam Amp.	5-AW	Cathode	6.3	0.9	0.2m	12.0	7.0	CCS	25	250	.....	150	20	3800	0.2	17.0					
	T-12									ICAS	30	400	.....	140	3000	.....	15					

Same as Type 807.
Same as Type 807.

A-F POWER AMPLIFIER AND MODULATOR — CLASS AB₁

TYPE	CONSTRUCTION			EMITTER			CAPACITANCES			USE	MAXIMUM RATINGS			TYPICAL OPERATION										TYPE
	Style	Class	Base	Type	Volts	Amps	Cgp	Cin	Cout		Watts Plate Dissipation	Ma. Plate Current	Screen Volts	Suppressor Volts	Ma. Plate Current	Ma. Screen Current	Me. Grid Current	Watts Driving Power	Watts Power Output					
																				Ma. Plate Current	Negative Grid Volts	Ma. Plate Current	Ma. Screen Current	
807*	ST-16	Beam Amp.	5-AW	Cathode	6.3	0.9	0.2m	12.0	7.0	CCS	25	400	.....	140	.....	3000	.....	15			
	T-12									ICAS	30	400	.....	140	.....	3000	.....	15			

*Typical operation values are for 2 tubes. □ Maximum ratings and typical operation values are for 2 tubes. m Maximum ° At Maximum Signal

R-F POWER AMPLIFIER — CLASS B TELEPHONY

TYPE	CONSTRUCTION			EMITTER			CAPACITANCES			USE	MAXIMUM RATINGS		TYPICAL OPERATION										TYPE
	Style	Class	Base	Type	Volts	Amps	C _{gp}	C _{in}	C _{out}		Watts Plate Dissipation	Ma. Plate Current	Screen Volts	Negative Grid Volts	Suppressor Volts	Ma. Plate Current ^c	Ma. Screen Current ^c	P-P Load in Ohms	Watts Driving Power	Watts Power Output			
																					Triode	Pentode	
801-A/801	ST-16	Triode	4-D	Thor. Fil.	7.5	1.25	6.0	4.5	1.5	CCS	20	500	60	.....	45	.....	0.2	2.2	6	801-A/801	
											20	600	75	.....	45	.....	0.2	2.3	7.5		
804 †	T-16	Pentode	5-J	Thor. Fil.	7.5	3.0	.01 ^m	16	14.5	CCS	40	1000	20	0	45	12	1	.35	11	804 †			
											40	1000	20	45	11.5	1	.3	12					
											40	1000	20	45	11	1	.25	16					
805	T-18	Triode	3-N	Thor. Fil.	10.0	3.25	6.5	8.5	10.5	CCS	50	1500	26	45	50	12	1.5	.5	28	805			
											125	1500	0	.....	135	.....	15	11.0	55		
											125	1500	10	.....	115	.....	15	7.5	57.5		
807	ST-16	Beam Amp.	5-AW	Cathode	6.3	0.9	0.2 ^m	12.0	7.0	CCS	25	400	25	.....	75	4	0	0.25	9	807		
											500	250	25	.....	75	4	0	0.25	12.5			
											600	250	25	.....	62.5	3	0	0.2	12.5			
5933/807W	T-12									CCS	30	750	35	.....	60	3	0	0.12	15	5933/807W		
										ICAS	90	500	5	.....	50	.....	6	1.4	7.5		
809	ST-19	Triode	3-G	Thor. Fil.	6.3	2.5	6.7	5.7	0.9	CCS	25	500	10	.....	50	.....	5	1.4	12.5	809	
											25	750	10	.....	50	.....	5	1.4	12.5		
											30	1000	30	.....	45	.....	4	1.5	15		
810	T-20	Triode	2-N	Thor. Fil.	10.0	4.5	4.8	8.7	12.0	CCS	125	1500	50	.....	115	.....	2	6	60	810	
											125	2000	65	.....	93	.....	2	4	60		
											175	2250	70	.....	100	.....	2	4	75		
811	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.5	5.5	0.6	CCS	40	1250	0	.....	48	.....	6	1	20	811	
										ICAS	50	1500	6	.....	50	.....	6	1.5	25		
812	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.3	5.3	0.8	CCS	40	1250	35	.....	48	.....	1	1.2	20	812	
											50	1500	45	.....	50	.....	1.1	1.5	25		
813	T-20	Beam Amp.	5-BA	Thor. Fil.	10.0	5.0	0.25 ^m	16.3	14.0	CCS	100	1500	60	.....	100	4	.....	<2.0	50	813	
											100	2000	75	.....	75	3	.....	<2.0	50		
815	T-16	Duo Beam Amplifier	8-BY	Cathode	12.6	0.8	0.2 ^m	14	8.5	CCS	20	400	25	.....	75	4	.....	0.8	10.5	815	
										ICAS	25	500	25	.....	75	3	.....	0.7	13		
837	ST-16	Pentode	6-BM	Cathode	12.6	0.7	0.20 ^m	16	10	CCS	12	400	25	.....	35	10	1	0.4	4	837		
											12	500	25	.....	30	15	0	0.2	5			
1625	ST-16	Beam Amp.	5-AZ	Cathode	12.6	0.45	0.2 ^m	11	7	CCS	12	500	25	.....	30	12	0	0.1	5.5	1625		
										ICAS	85	200	25	.....	30	12	0	0.1	5.5			
8005	ST-19	Triode	3-G	Thor. Fil.	10.0	3.25	5.0	6.4	1.0	CCS	75	1250	65	.....	85	.....	2	5.5	40	8005	
										ICAS	85	1500	80	.....	83	.....	1	5.0	45		

† Pentode Connection. m Maximum. ° At Maximum Signal.

R-F POWER AMPLIFIER AND OSCILLATOR — CLASS C TELEGRAPHY

TYPE	CONSTRUCTION		EMITTER		CAPACITANCES			USE	MAXIMUM RATINGS		TYPICAL OPERATION								TYPE		
									Watts Plate Dissipation	Ma. Plate Current	Plate Volts	Screen Volts	Negative Grid Volts	Suppressor Volts	Ma. Plate Current	Ma. Screen Current	Ma. Grid Current	Watts Driving Power		Watts Power Output	
	Style	Class	Base	Type	Volts	Amps	C _{gp}	C _{in}	C _{out}	Watts Plate Dissipation	Ma. Plate Current	Plate Volts	Screen Volts	Negative Grid Volts	Suppressor Volts	Ma. Plate Current	Ma. Screen Current	Ma. Grid Current	Watts Driving Power	Watts Power Output	
2E22	ST-16	Pentode	5-J	Coated Fil.	6.3	1.5	0.25 ^s _m	13	8.0	CCS	30	110	500	250†	0	100	16	6.0	0.35	30	2E22
													500	250†	22.5	100	16	6.0	0.35	34	
													750	250†	0	100	16	6.0	0.35	48	
													750	250†	22.5	100	16	6.0	0.35	53	
2E24	T-9	Beam Amp.	7-CL	Coated Fil.	6.3	0.65	0.11 ^m	8.5	6.5	ICAS	13.5	85	600	195	0	66	10	3.0	0.31	27	2E24
													350*	170*	0	85	10	3.0	2.0	16.5	
2E26	T-9	Beam Amp.	7-CK	Cathode	6.3	0.8	0.20 ^m	13	7	CCS	10	75	400	190	.....	75	11	3	0.12	20	2E26
													500	185	.....	60	11	3	0.15	20	
													600	185	.....	66	10	3	0.17	27	
2E30	T-5½	Beam Amp.	7-CQ	Coated Fil.	6.0	0.65	0.2	9.5	6.6	CCS	10	60	200	200	0	45	10	2.3	0.15	5.0	2E30
													250	200	0	50	10	2.5	0.2	7.5	
3D24	Lock-in	Tetrode	7-CW	Thor. Fil.	6.3	3.0	0.2 ^m	6.3	2.4	CCS	45	100	1500	375	.....	90	22	10	4.0	105	3D24
													2000	375	.....	90	20	10	4.0	140	
801-A/801	ST-16	Triode	4-D	Thor. Fil.	7.5	1.95	6.0	4.5	1.5	CCS	20	70	500	.....	125	65	.....	15	3.5	20	801-A/801
													600	.....	150	65	.....	15	4	25	
804†	T-16	Pentode	5-J	Thor. Fil.	7.5	3.0	0.1 ^m	16	14.5	CCS	40	95	1000	300	100	45	92	7	.95	60	804†
													1250	300	100	80	33	7	.9	64	
													1250	300	100	45	92	7	.95	80	
804A													1500	300	100	45	100	7	1.95	110	
													1250	180	100	45	92	8	1.2	80	804A
													1500	200	100	45	100	12	2.2	110	
805	T-18	Triode	3-N	Thor. Fil.	10.0	3.95	6.5	8.5	10.5	CCS	125	210	1000	.....	95	200	.....	40	8.5	130	805
													1250	.....	100	200	.....	40	8.5	170	
													1500	.....	105	200	.....	40	8.5	215	
807	ST-16	Beam Amp.	5-AW	Cathode	6.3	0.9	0.2 ^m	12.0	7.0	CCS	25	100	400	250	45	100	7.5	3.5	0.2	25	807
													500	250	45	100	6	3.5	0.2	30	
5933/807W	T-12												600	250	45	100	7	3.5	0.2	40	
													750	250	45	100	6	3.5	0.2	50	
809	ST-19	Triode	3-G	Thor. Fil.	6.3	2.5	6.7	5.7	0.9	ICAS	30	100	500	.....	50	100	.....	20	2.5	35	809
													750	.....	60	100	.....	20	2.5	55	
													1000	.....	75	100	.....	25	3.8	75	
810	T-20	Triode	2-N	Thor. Fil.	10.0	4.5	4.8	8.7	12.0	CCS	125	250	1500	.....	120	250	.....	40	10	275	810
													2000	.....	160	250	.....	40	12	375	
													2500	.....	180	300	.....	60	19	575	
811	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.5	5.5	0.6	CCS	40	125	1250	.....	87.5	125	.....	35	7	115	811
													1500	.....	113	150	.....	35	8	170	

811-A	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.6	5.9	0.7	CCS	45	175	1950	50	140	45	5.7	135	811-A
										ICAS	65	175	1500	70	173	40	7.1	200	
										CCS	45	65	1750	70	130	46	12	175	
										CCS	45	160	1125	35	125	25	3	135	
812	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.3	5.3	0.8	CCS	40	125	1250	125	125	25	5	116	812
										CCS	40	75	1500 rms	Self Bias 5000	150	25	.....	170	
										ICAS	55	150	1500	175	150	25	6.5	170	
812-A										CCS	45	175	1250	90	140	30	5.4	130	
										ICAS	65	175	1500	120	173	30	6.5	190	
										CCS	45	75	1740	3500	150	29	12	200	
813	T-20	Beam Amp.	5-BA	Thor. Fil.	10.0	5.0	0.25m	16.3	14.0	CCS	100	180	1250	75	180	12	1.7	170	813
815	T-16	Duo Beam Amplifier	8-BY	Cathode	12.6	0.8	0.2m	14	8.5	CCS	20	150	400	45	150	17	0.23	44	815
										ICAS	25	150	500	45	150	17	0.18	56	
899-B	T-16	Duo Beam Amplifier	7-BP	Cathode	6.3	2.25	1.25m	14.5	7.0	CCS	30	212	750	50	120	8	.45	65	899B
										ICAS	40	212	500	45	240	12	0.7	83	
										ICAS			750	55	160	12	0.8	87	
										CCS	40	240	500	45	240	12	0.7	83	
										CCS			750	55	160	12	0.8	87	
										ICAS	45	240	750	50	200	16	1.1	110	
832A	T-16	Duo Beam Amplifier	7-BP	Cathode	12.6	0.8	0.05m	7.5	3.8	CCS	15	90	500	65	72	9.6	0.18	26	832A
837	ST-16	Pentode	6-BM	Cathode	12.6	0.7	0.20m	16	10	CCS	12	80	400	40	48	2.8	0.19	26	Push Pull
										CCS			500	85	0	0.8	20		
										CCS			500	75	0	0.4	22		
										CCS	12	80	400	70	70	8	0.75	18	▲
841	S-17	Triode	4-D	Thor. Fil.	7.5	1.25	7	4	3	CCS	15	60	350	30	50	15	1.8	11	841
1625	ST-16	Beam Amp.	5-AZ	Cathode	12.6	0.45	0.2m	11	7	CCS			450	34	50	15	1.8	15	1625
1626	ST-12	Triode	6-Q	Cathode	12.6	0.25	4.4	3.2	3.4	CCS	5	25	250	70	105	25	0.5	4	1626
10-Y	ST-16	Triode	4-D	Thor. Fil.	7.5	1.25	7	4	3	CCS	15	60	350	90	55	15	3	9	10-Y
VT25	ST-16	Triode	4-D										450	115	55	3.3	13	VT25	
8005	ST-19	Triode	3-G	Thor. Fil.	10.0	3.25	5.0	6.4	1.0	CCS	75	200	1250	115	190	30	6.5	170	8005
										ICAS	85	200	1500	130	200	32	7.5	220	

■ Self-rectifying Oscillator
 † Series Screen Resistor = 15,000 ohms.
 Typical operation in push-pull circuit at 50 mc.
 ‡ Series Screen Resistor = 30,000 ohms.
 □ Ohm Grid Resistor.
 ▲ Tetrode connection.
 † Pentode connection.
 ‡ Shielded m Maximum.

PLATE-MODULATED R-F POWER AMPLIFIER — CLASS C TELEPHONY

TYPE	CONSTRUCTION			EMITTER			CAPACITANCES			USE	MAXIMUM RATINGS		TYPICAL OPERATION							TYPE		
	Style	Class	Base	Type	Volts	Amps	C _{cp}	C _{in}	C _{out}		Watts Plate Dissipation	Ma. Plate Current	Plates Volts	Screen Volts	Negative Grid Volts	Suppressor Volts	Ma. Plate Current	Ma. Screen Current	Ma. Grid Current		Watts Driving Power	Watts Power Output
										Ma. Plate Current										Ma. Screen Current			Ma. Grid Current	Watts Driving Power	Watts Power Output
2E24	T-9	Beam Amp.	7-CL	Coated Fil.	6.3	0.65	0.11m	8.5	6.5	CCS	6.7	60	400	180	45	.....	50	8.	2.5	0.15	13.5	2E24
2E26	T-9	Beam Amp.	7-CK	Cathode	6.3	0.8	0.20m	13	7	CCS	9.	70	500	180	45	.....	54	8.	2.5	0.16	18	2E24
2E30	T-5½	Beam Amp.	7-CQ	Filament	6.0	0.65	0.2	9.5	6.6	CCS	9.0	60	500	180	50	.....	50	7.5	2.5	0.15	13.5	2E36
3D24	Lock-In	Tetrode	7-CW	Thor. Fil.	6.3	3.0	0.2m	6.5	2.4	CCS	4.5	80	300	200	46	.....	45	10	2.3	0.15	5.0	2E30
801-A/801	ST-16	Triode	4-D	Thor. Fil.	7.5	1.25	6.0	4.5	1.5	CCS	.....	.....	300	300	300	.....	80	16	.....	3.50	74	3D24
804†	T-16	Pentode	5-J	Thor. Fil.	7.5	3.0	.015 _m	16	14.5	CCS	27	80	1000	220	90	50	75	21	6	0.65	50.	804†
804A										ICAS	35	80	1250	250	90	50	75	20	6	0.75	65	804A
805	T-18	Triode	3-N	Thor. Fil.	10.0	3.25	6.5	8.5	10.5	CCS	85	175	1000	170	80	tie to G2	75	24	8	1.1	50	804A
807	ST-16	Beam Amp.	5-AW	Cathode	6.3	0.9	0.2m	12.0	7.0	CCS	16.5	40	325	225	75	.....	160	.....	60	16	110	805
5933/807W	T-12												1250	160	155	.....	160	.....	60	16	140	807
808	G-22	Triode	2-D	Thor. Fil.	7.5	4.0	2.8	5.3	0.25	ICAS	25	60	600	275	90	.....	100	6.5	4.0	0.40	49.5	808
809	ST-19	Triode	3-G	Thor. Fil.	6.3	2.5	6.7	5.7	0.9	CCS	17.5	83	500	.....	135	.....	120	.....	35	9.0	90	809
810	T-20	Triode	2-N	Thor. Fil.	10.0	4.5	4.8	8.7	12.0	CCS	85	210	1000	750	60	.....	100	.....	32	3.2	38	810
811	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.5	5.5	0.6	ICAS	125	250	2000	.....	200	.....	210	.....	50	17	250	811
811-A	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.6	5.9	0.7	CCS	27	105	1000	.....	350	.....	250	.....	70	35	380	811
812	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.3	5.3	0.8	ICAS	40	125	1250	.....	100	.....	105	.....	50	9	82	811
812-A	ST-19	Triode	3-G	Thor. Fil.	6.3	4.0	5.5	5.4	0.77	CCS	30	125	1250	.....	125	.....	125	.....	50	11	120	811-A
										ICAS	45	150	1250	.....	180	.....	140	.....	45	6.1	88	811-A
										CCS	27	105	1000	.....	100	.....	105	.....	45	10.0	135	812
										ICAS	40	125	1250	.....	125	.....	125	.....	45	4.5	82	812
										CCS	40	125	1250	.....	110	.....	115	.....	25	6.0	120	812-A
										ICAS	45	150	1250	.....	115	.....	140	.....	35	7.6	130	812-A

TYPE	CONSTRUCTION	EMITTER		CAPACITANCES			USE	MAXIMUM RATINGS		TYPICAL OPERATION							TYPE					
		Style	Class	Base	Type	Volts		Amps	Cgp	Cin	Cout	Watts Plate Dissipation	Ma. Plate Current	Plate Volts	Screen Volts	Negative Grid Volts		Suppressor Volts	Ma. Plate Current	Ma. Screen Current	P. to P. Load In Ohms	Watts Driving Power	Watts Power Output
813	Beam Amp.	T-20	5-BA	Thor. Fil.	10.0	5.0	0.25m	16.3	14.0	CCS	67	150	1250	300	160	0	150	35	13	2.9	140	813
815 Push-Pull	Duo Beam Amp.	T-16	8-BY	Cathode	12.6	0.8	0.2m	14	8.5	ICAS	100	200	1600	300	160	0	150	30	12	2.7	180	
	Duo Beam Amp.	T-16	7-BP	Cathode	6.3	1.6	.....	.....	.....	ICAS	13.5	125	325	165	45	.....	123	16	4	.20	30
829-B Push-Pull	Duo Beam Amp.	T-16	7-BP	Cathode	6.3	2.25	.12m	14.5	7.0	CCS	21	212	600	200	70	.....	112	26	8	0.6	50
	Duo Beam Amp.	T-16	7-BP	Cathode	12.6	1.125	Natural Cooling	.....	.....	ICAS	28	212	425	200	60	.....	212	35	11	0.8	63
832-A Push Pull	Duo Beam Amp.	T-16	7-BP	Cathode	12.6	0.8	0.05m	7.5	3.8	CCS	10	68	425	200	60	.....	52	16	2.4	0.15	16
	Beam Amp.	ST-16	6-BM	Cathode	6.3	1.6	.....	.....	.....	CCS	8	50	600	200	65	.....	36	16	2.6	0.16	17
837†	Pentode	ST-16	6-BM	Cathode	12.6	0.7	0.20m	16	10	CCS	8	50	400	140	40	40	45	20	5	0.3	11	
837A	Triode	S-17	4-D	Thor. Fil.	7.5	1.25	7.	4.	3.	CCS	8	50	400	100	70	file to G2	45	30	7	0.7	11	
841	Triode	ST-16	4-D	Thor. Fil.	7.5	1.25	7.	4.	3.	CCS	10	60	250	.....	40	.....	50	.....	15	2.	7.
10-Y	Triode	ST-16	4-D	Thor. Fil.	7.5	1.25	7.	4.	3.	CCS	10	60	250	.....	47	.....	50	.....	15	2.	11.
	Beam Amp.	ST-16	5-AZ	Cathode	12.6	0.45	0.20m	11	7	CCS	10	60	250	.....	95	.....	45	.....	15	3.0	5.5
1685	Triode	ST-16	4-D	Thor. Fil.	12.6	0.45	0.20m	11	7	CCS	40	240	600	200	80	.....	200	30	15	1.4	85
VT25	Triode	ST-16	4-D	Thor. Fil.	12.6	0.45	0.20m	11	7	ICAS	75	200	1000	.....	195	.....	160	.....	28.	9	115
8005	Triode	ST-19	3-G	Thor. Fil.	10.0	3.25	5.0	6.4	1.0	ICAS	75	200	1000	.....	195	.....	190	.....	28.	9	170

Same as Type 807.
Same as Type 807.

Same as Type 10-Y

† Pentode Connection ▲ Tetrode Connection m Maximum.

GRID MODULATED R-F POWER AMPLIFIER — CLASS C TELEPHONY

TYPE	CONSTRUCTION	EMITTER		CAPACITANCES			USE	MAXIMUM RATINGS		TYPICAL OPERATION							TYPE					
		Style	Class	Base	Type	Volts		Amps	Cgp	Cin	Cout	Watts Plate Dissipation	Ma. Plate Current	Plate Volts	Screen Volts	Negative Grid Volts		Suppressor Volts	Ma. Plate Current	Ma. Screen Current	P. to P. Load In Ohms	Watts Driving Power	Watts Power Output
804	Pentode	T-16	5-J	Thor. Fil.	7.5	3.0	.01s	16	14.5	CCS	40	50	1000	300	115	0	45	15	2	1.1	14	804
813	Beam Amp.	T-20	5-BA	Thor. Fil.	10.0	5.0	0.25m	16.3	14.0	CCS	100	200	1250	300	115	45	45	11	2	0.85	16	
	Beam Amp.	T-16	7-BP	Cathode	12.6	0.8	0.05s	7.5	3.8	CCS	15	55	500	200	115	45	45	11	2	0.85	21	
832-A Push Pull	Duo Beam Amp.	T-16	7-BP	Cathode	6.3	1.6	.....	.....	.....	ICAS	50	50	1500	300	130	45	50	13.5	3.7	1.3	28
	Beam Amp.	ST-16	6-BM	Cathode	12.6	0.7	0.20m	16	10	CCS	100	100	1500	400	140	0	70	3	.....	<2.0	40
837	Pentode	ST-16	6-BM	Cathode	12.6	0.7	0.20m	16	10	CCS	12	40	2000	400	120	0	75	3	.....	<2.0	50
	Duo Beam Amp.	T-16	8-BY	Cathode	12.6	0.8	0.2m	14	8.5	ICAS	25	75	2950	400	110	0	85	2.5	.....	<2.0	75
815 Push-Pull	Duo Beam Amp.	T-16	7-BP	Cathode	12.6	0.8	0.05s	7.5	3.8	CCS	15	55	500	200	55	.....	44	3.0	0	0.1	8.0
	Beam Amp.	ST-16	6-BM	Cathode	6.3	1.6	.....	.....	.....	CCS	20	75	750	200	60	.....	29	2.0	0	0.1	8.5
815 Push-Pull	Duo Beam Amp.	T-16	8-BY	Cathode	12.6	0.8	0.2m	14	8.5	ICAS	25	75	2950	400	110	0	85	2.5	.....	<2.0	13
	Beam Amp.	T-16	7-BP	Cathode	6.3	1.6	.....	.....	.....	CCS	12	40	2000	400	120	0	75	3	.....	<2.0	40

SUPPRESSOR-MODULATED R-F POWER AMPLIFIER—CLASS C TELEPHONY

TYPE	CONSTRUCTION		EMITTER		CAPACITANCES			USE	MAXIMUM RATINGS		TYPICAL OPERATION						TYPE				
	Style	Class	Base	Type	Volts	Amps	C _{gp}		C _{in}	C _{cut}	Watts Plate Dissipation	Ma. Plate Current	Plate Volts	Screen Volts	Negative Grid Volts	Suppressor Volts		Ma. Plate Current	Ma. Screen Current	Ma. Grid Current	Watts Driving Power	Watts Power Output
2E22	ST-16	Pentode	5-J	Coated Fil.	6.3	1.5	0.25 m	13	8.0	CCS	30	500	250	R _{g1} =10K	-65	50	29	6.5	0.6	10.5	2E22
804	T-16	Pentode	5-J	Thor. Fil.	7.5	3.0	.015 m	16	14.5	CCS	40	750	250	R _{g1} =10K	-90	55	29	6.5	0.6	16.5	804
837	ST-16	Pentode	6-BM	Cathode	12.6	0.7	0.20x m	16	10	CCS	12	400	6500 ohms†	20	-55	35	37	8	0.4	4	837

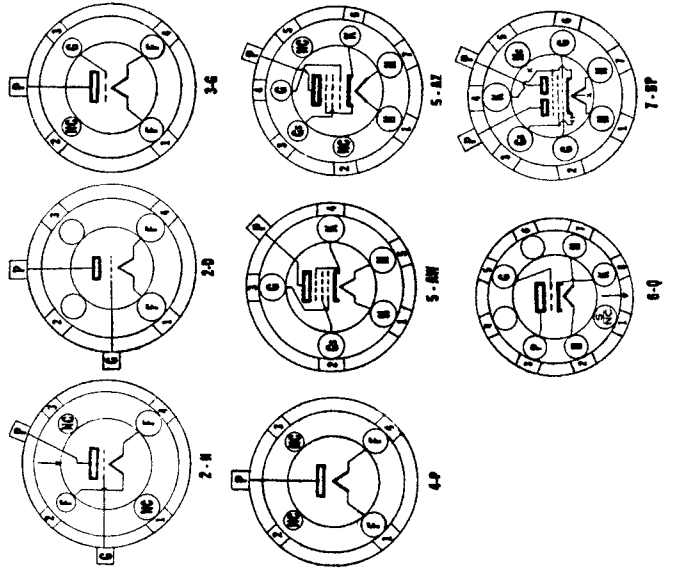
† Voltagedrops from unmod. plate supply through resistor. S—Shielded. m Maximum.

RECTIFIERS

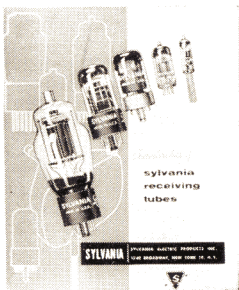
TYPE	CONSTRUCTION		USE	MAX. PEAK INVERSE PLATE VOLTS	MAX. PEAK PLATE CURRENT MA.	MAX. AVERAGE PLATE CURRENT MA.	TUBE VOLTAGE DROP	TYPE
	STYLE	CLASS						
816	ST-12	Diode Mercury Vapor	4-P	7500	500	125	15	816
866-A/866	ST-19	Diode Mercury Vapor	4-P	10,000	1000	250	15	866-A/866
872-A/872	T-18	Diode Mercury Vapor	4-AT	10,000	5000	1250	10	872-A/872
1616	T-16	Diode High Vacuum	4-P	5500	800	130		1616

BASE DIAGRAMS TUBE TYPES BY BASE ARRANGEMENT

BASE	TYPE	BASE	TYPE
2-D	808	5-AZ	1625
2-N	'810	5-BA	813
3-G	809, 811-A, 812-A, 8005	6-BM	837
3-N	805	7-BP	1626
4-AT	872	7-CK	898, 832-A
4-D	801, 107, VT25, 841	7-CW	3D24
4-P	816, 866, 1616	7-CL	2E24
5-AW	807, 5933/807W	7-CQ	2E30
5-J	2E25, 804	8-BY	815



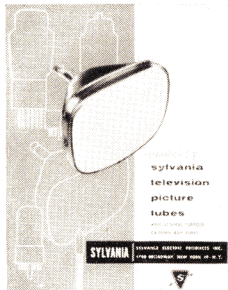
Technical Literature



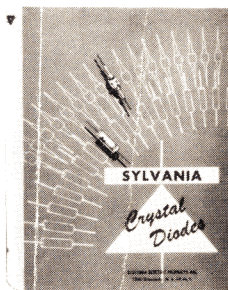
TUBE CHARACTERISTICS BOOKLETS

Complete information on characteristics of all types of Sylvania tubes, including tube base diagrams and helpful suggestions. FREE.

RECEIVING TUBES
Order No. 211

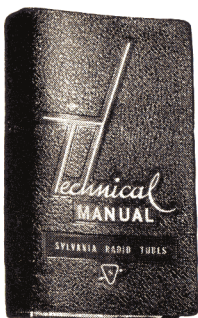


TELEVISION TUBES
Order No. 216



GERMANIUM CRYSTAL DIODES
Order No. EC36D
FREE

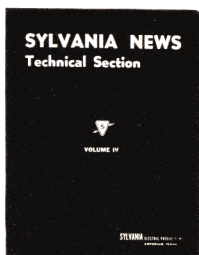
Published by Sylvania and constantly revised to keep you informed about the most recent electronic developments.



TECHNICAL MANUAL

Complete data, in convenient forms, on Sylvania tubes. Ring binder permits easy insertion of new data sheets which are mailed as released at no additional cost.

Order No. 202 \$2.00
Additional binders—75c



TECHNICAL SECTIONS

Contain all issues of Technical Sections of Sylvania News. Vol. 1 (1935 to 1940 incl.), Vol. 2 (1941 to 1945 incl.), Vol. 3 (1946 to 1949 incl.), Vol. 4 (1950 to 1953 Incl.), Vol. 5 (1954 to Date).

Order No. 220 \$1 per vol.
(Indicate Volume No.)



ELECTRONIC TUBE BOOKLET

New folder No. EC20-J, gives characteristics and descriptions of special electronic tubes.

Order No. 217 FREE



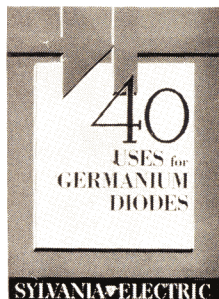
Order now

from your Sylvania distributor

or write to

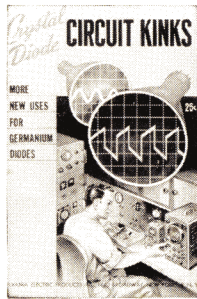
Sylvania
Central Advertising
Distribution Dept.

1100 Main Street
Buffalo 9, N. Y.



40 USES FOR GERMANIUM DIODES

Order No. 240 25c



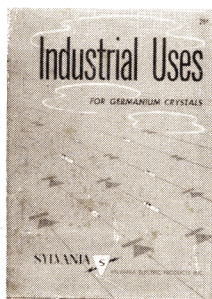
CRYSTAL DIODE CIRCUIT KINKS

Order No. 239 25c



ELECTRONIC SHORTCUTS FOR HOBBYISTS

Order No. 241 25c



INDUSTRIAL USES FOR GERMANIUM CRYSTALS

Order No. 242 25c

SYLVANIA
ELECTRIC PRODUCTS INC.
1740 BROADWAY
NEW YORK 19, N. Y.

