

Raytheon
50



INDUSTRIAL TUBES
cathode ray and storage



INDUSTRIAL CATHODE RAY TUBES

Type	Typical Operation	Type of Focus	Type of Defl.	Defl. Angle	Max. Dim. Inches		Heater		Min. Useful Screen Size Diam.	Anode Volts	TYPICAL OPERATING CONDITIONS			Focus Current Ma.	Phosphor. Persistence	Type
					Length	Diam.	Volts	Amps.			G2 or A2 Volts	Cutoff G1 Volts	Focus Volts			
3ACP2	Oscillograph	Electro.	Electro.	—	10 $\frac{1}{8}$ "	3 $\frac{1}{8}$ "	6.3	0.6	2.68	4000	2000	-45 to -75	390 to 550	0	Long	3ACP2
3ACP7	Oscilloscope	Electro.	Electro.	—	10 $\frac{1}{8}$ "	3 $\frac{1}{8}$ "	6.3	0.6	2.68	—	4000	-45 to -75	390 to 550	0	Long	3ACP7
3ADP1	Oscillo.	Electro.	Electro.	—	10 $\frac{1}{8}$ "	3 $\frac{1}{8}$ "	6.3	0.6	2 $\frac{1}{8}$ "	3300	320	-52 to -87	30 to 470	0	Short	3ADP1
3UP1	Oscilloscope	Electro.	Electro.	—	7 $\frac{3}{8}$ "	2 $\frac{3}{8}$ "	6.3	0.6	1 $\frac{1}{8}$ " x 1 $\frac{3}{4}$ "	—	1100	-27 to -63	160 to 310	0	Short	3UP1
3UP7	Oscilloscope	Electro.	Electro.	—	7 $\frac{1}{2}$ "	2 $\frac{1}{8}$ "	6.3	0.6	1 $\frac{1}{8}$ " x 1 $\frac{3}{4}$ "	—	2000	—	—	0	Long	3UP7
3WP1	Oscillograph	Electro.	Electro.	—	11 $\frac{3}{8}$ "	3 $\frac{1}{8}$ "	6.3	0.6	2 $\frac{3}{4}$ "	2500	—	0 to 200	330 to 620	0	Medium	3WP1
3WP7	Oscillograph	Electro.	Electro.	—	11 $\frac{3}{8}$ "	3 $\frac{1}{8}$ "	6.3	0.6	2 $\frac{3}{4}$ "	2500	—	0 to 200	330 to 620	0	Medium	3WP7
4CP7	Oscilloscope	Mag.	Mag.	50°	11 $\frac{1}{2}$ "	4 $\frac{3}{4}$ "	6.3	0.6	3 $\frac{3}{8}$ "	20,000	—	-70 to -140	—	19.5 μ A	Long	4CP7
5ABP1	Oscillograph	Electro.	Electro.	—	17 $\frac{1}{8}$ "	5 $\frac{1}{32}$ "	6.3	0.6	4 $\frac{3}{8}$ "	—	2000	-52 to -87	400 to 690	0	Medium	5ABP1
5ABP7	Oscillograph	Electro.	Electro.	—	17 $\frac{1}{8}$ "	5 $\frac{1}{32}$ "	6.3	0.6	4 $\frac{3}{8}$ "	4000	2000	-33 to -65	400 to 515	0	Long	5ABP7
5ABP11	Oscillograph	Electro.	Electro.	—	17 $\frac{1}{8}$ "	5 $\frac{1}{32}$ "	6.3	0.6	4 $\frac{3}{8}$ "	—	4000	-52 to -87	400 to 690	0	Short	5ABP11
5ADP7	Oscilloscope	Electro.	Electro.	—	16 $\frac{1}{8}$ "	5 $\frac{1}{32}$ "	6.3	0.6	—	4000	2000	-45 to -75	—	0	Long	5ADP7
5AHP7 5AHP7A	Oscillograph	Electro.	Mag.	53°	11 $\frac{3}{8}$ "	5 $\frac{1}{32}$ "	6.3	0.6	4 $\frac{1}{4}$ "	7000	300 VDC	-28 to -72	0 to 250	0	Long	5AHP7 5AHP7A
5AHP14 5AHP14A	Oscillograph	Electro.	Mag.	53°	11 $\frac{3}{8}$ "	5 $\frac{1}{32}$ "	6.3	0.6	4 $\frac{1}{4}$ "	7000	300 VDC	-28 to -72	0 to 250	0	Med.-Long	5AHP14 5AHP14A
5AKP19	Flying Spot Scanner	Magn.	Magn.	50°	12 $\frac{3}{8}$ "	5"	6.3	0.6	4 $\frac{1}{4}$ "	30000	40000 VDC	-80 to -140	—	250	Short	5AKP19
5AHP19A	Oscillograph	Electro.	Mag.	53°	11 $\frac{3}{8}$ "	5 $\frac{1}{32}$ "	6.3	0.6	4 $\frac{1}{4}$ "	7000	300 VDC	-28 to -72	0 to 250	0	Long	5AHP19A
5AMP1	Oscillo.	Electro.	Electro.	—	17 $\frac{3}{8}$ "	5 $\frac{1}{4}$ "	6.3	0.6	4 $\frac{1}{2}$ "	2500	1500	-13.6 to -22.4	0 to 300	0	Long	5AMP1
5FP7A	Oscillograph	Mag.	Mag.	53°	11 $\frac{1}{2}$ "	5 $\frac{1}{32}$ "	6.3	0.6	4 $\frac{1}{2}$ "	7000	250	-25 to -70	—	128	Long	5FP7A
5FP14A	Oscillograph	Mag.	Mag.	53°	11 $\frac{1}{2}$ "	5 $\frac{1}{32}$ "	6.3	0.6	4 $\frac{1}{4}$ "	7000	250	-25 to -70	—	128	Long	5FP14A
5WFP15	Flying-Spot Video-Signal Generator	Electro.	Mag.	50°	11 $\frac{1}{8}$ "	5 $\frac{1}{8}$ "	6.3	0.6	4 $\frac{1}{4}$ "	—	20,000	-42 to -98	—	0	Very Short	5WFP15
5ZP16	Flying-Spot Video-Signal Generator	Electro.	Mag.	40°	14 $\frac{3}{4}$ "	5 $\frac{1}{8}$ "	6.3	0.6	4 $\frac{1}{4}$ "	27,000	200	—	—	0	Extremely Short	5ZP16
7ABP7	Radar Ind.	Electro.	Mag.	50°	13 $\frac{1}{2}$ "	7 $\frac{3}{8}$ "	6.3	0.6	6"	7000	300	-33 to -77	0 to 250	0	Long	7ABP7
7ABP7A	Radar Ind.	Electro.	Mag.	50°	13 $\frac{1}{2}$ "	7 $\frac{3}{8}$ "	6.3	0.6	6"	7000	300	—	0 to 250	0	Long	7ABP7A
7ABP14	Radar Ind.	Electro.	Mag.	50°	13 $\frac{1}{2}$ "	7 $\frac{3}{8}$ "	6.3	0.6	6"	7000	300	—	0 to 250	0	Med.-Long	7ABP14
7ABP19A	Radar Ind.	Electro.	Mag.	50°	13 $\frac{1}{2}$ "	7 $\frac{3}{8}$ "	6.3	0.6	6"	7000	300	—	0 to 250	0	Long	7ABP19A
7AEP7	Radar Ind.	Electro.	Electro.	—	15 $\frac{3}{4}$ "	7 $\frac{3}{8}$ "	6.3	0.6	6 $\frac{1}{8}$ "	4000	—	-45 to -75	—	0	Long	7AEP7
7BP7A	Oscillograph	Mag.	Mag.	53°	13 $\frac{3}{8}$ "	7 $\frac{1}{8}$ "	6.3	0.6	6"	7000	250	-25 to -70	—	0	Long	7BP7A
7MP7	Radar Ind.	Mag.	Mag.	50°	13 $\frac{1}{8}$ "	7 $\frac{3}{8}$ "	6.3	0.6	6"	7000	250	-27 to -63	—	85	Long	7MP7
7MP14	Radar Ind.	Mag.	Mag.	50°	13 $\frac{1}{8}$ "	7 $\frac{3}{8}$ "	6.3	0.6	6"	7000	250	-27 to -63	—	85	Long	7MP14
7SP7	Oscilloscope	Mag.	Mag.	53°	14 $\frac{3}{8}$ "	7 $\frac{3}{8}$ "	6.3	0.6	6"	20,000	—	-63 to -147	—	195	Long	7SP7
7UP7	Oscillo.	Mag.	Mag.	53°	13 $\frac{1}{4}$ "	7"	6.3	0.6	6"	10,000	700	-125	—	0	Long	7UP7
10KP7	Oscillograph	Mag.	Mag.	50°	18"	10 $\frac{3}{8}$ "	6.3	0.6	9"	10,000	700	-27 to -63	—	0	Long	10KP7
10KP7A	Oscilloscope	Mag.	Mag.	50°	18"	10 $\frac{3}{8}$ "	6.3	0.6	9"	9000	250	-27 to -63	—	105	Long	10KP7A
10NP11	Video Record	Mag.	Mag.	52°	17 $\frac{3}{8}$ "	10 $\frac{1}{2}$ "	6.3	0.6	—	25,000	350	-65 to -125	0 to 300	110	Short	10NP11

10QP	Oscilloscope	Mag.	Mag.	50°	10"	10 $\frac{1}{4}$ "	6.3	0.6		20,000 (including G2)		-63 to -147		0	Long	10QP7
10UP14B	Radar Ind. Monitor	Electro.	Mag.	50°	21 $\frac{1}{4}$ "	15 $\frac{1}{4}$ "	6.3	0.6	14 $\frac{3}{8}$ "	10,000	300	-28 to -72	-500 to -1000	0	Long	10UP14B
10SP4	Kinescope	Electro.	Mag.	50°	17"	10 $\frac{1}{4}$ "	6.3	0.6	9 $\frac{1}{4}$ "	20,000	410			0		10SP4
10UP7A	Radar Ind.	Electro.	Mag.	50°	18"	10 $\frac{1}{4}$ "	6.3	0.6	9"	10,000	300	-28 to -72	-150 to +150	0	Long	10UP7A
10WP7	Radar Ind.	Electro.	Mag.	50°	17 $\frac{1}{4}$ "	10 $\frac{1}{4}$ "	6.3	0.6	9"	10,000	300	-28 to -72	0 to 300	0	Long	10WP7
10WP7A	Radar Ind.	Electro.	Mag.	50°	17 $\frac{1}{4}$ "	10 $\frac{1}{4}$ "	6.3	0.6	9"	10,000	300	-28 to -72	0 to 300	0	Long	10WP7A
10WP14	Radar Ind.	Electro.	Mag.	50°	17 $\frac{1}{4}$ "	10 $\frac{1}{4}$ "	6.3	0.6	9"	10,000	300	-28 to -72	0 to 300	0	Med-Long	10WP14
10WP19A	Radar Ind.	Electro.	Mag.	50°	17 $\frac{1}{4}$ "	10 $\frac{1}{4}$ "	6.3	0.6	9"	10,000	300	-27 to -72	0 to 300	0	Long	10WP14
12ABP7 12ABP7A	Radar Ind.	Electro.	Mag.	55°	18 $\frac{3}{8}$ "	12 $\frac{3}{8}$ "	6.3	0.6	11"	10,000	300	-28 to -72	0 to 300	0	Long	12ABP7 12ABP7A
12ABP14 12ABP14A	Radar Ind.	Electro.	Mag.	55°	18 $\frac{3}{8}$ "	12 $\frac{3}{8}$ "	6.3	0.6	11"	10,000	300	-28 to -72	0 to 300	0	Med-Long	12ABP14 12ABP14A
12ABP19A	Radar Ind.	Electro.	Mag.	55°	18 $\frac{3}{8}$ "	12 $\frac{3}{8}$ "	6.3	0.6	11"	10,000	300	-28 to -82		0		12ABP19A
12DP7A	Radar Ind.	Mag.	Mag.	50°	20"	12 $\frac{3}{8}$ "	6.3	0.6	10"	7,000	250	-25 to -70		117	Long	12DP7A
12SP7	Radar Ind.	Mag.	Mag.	54°	19 $\frac{1}{2}$ "	12 $\frac{1}{2}$ "	6.3	0.6	11"	9000	250	-27 to -63		104	Long	12SP7
16ADP7 16ADP7A	Radar Ind.	Mag.	Mag.	53°	22"	16"	6.3	0.6	14 $\frac{3}{8}$ "	12,000	250	-27 to -63		95	Long	16ADP7 16ADP7A
17AVP7	Kinescope	Electro.	Mag.	90°	16"	12 $\frac{1}{2}$ "	6.3	0.6	14 $\frac{1}{4}$ " x 10 $\frac{3}{4}$ "	12,000	300	-33 to -77		0	Long	17AVP7
21FP7A	Radar Ind.	Electro.	Mag.	70°	23 $\frac{1}{2}$ "	21 $\frac{1}{2}$ "	6.3	0.6	13 $\frac{1}{8}$ x 19 $\frac{1}{8}$ "	16,000	300	-28 to -72	-65 to +350	0	Long	21FP7A
CK1351P7A	Radar Ind.	Electro.	Mag.	70°	17 $\frac{3}{4}$ "	15 $\frac{1}{2}$ "	6.3	0.6	14 $\frac{1}{2}$ "	10,000	300	-28 to -72	-250 to +250	0	Short	CK1351P7A
CK1352P7A	Radar Ind.	Electro.	Mag.	53°	21 $\frac{1}{2}$ "	14 $\frac{2}{2}$ "	6.3	0.6	13 $\frac{3}{8}$ "	12,000	300	-40 to -70	3800	0	Long	CK1352P7A
CK1353P7	Radar Ind.	Electro.	Mag.	53°	21"	14 $\frac{2}{2}$ "	6.3	0.6	13 $\frac{3}{8}$ "	10,000	1000	-35 to -75	-35 to +400	0	Long	CK1353P7
CK1353P7A	Radar Ind.	Electro.	Mag.	53°	21 $\frac{1}{2}$ "	16"	6.3	0.6	13 $\frac{3}{8}$ "	12,000	300	-33 to -77	-135 to +400	0	Long	CK1353P7A
CK1354P11A	Video Record	Electro.	Mag.	44°	10 $\frac{1}{4}$ "	3"	6.3	0.6	2 $\frac{5}{8}$ "	10,000	700	-30 to -75	0 to 300	0	Short	CK1354P11A
CK1355P19A	Radar Ind.	Electro.	Mag.	50°	13 $\frac{1}{4}$ "	7 $\frac{1}{4}$ "	6.3	0.6	6"	7500	300	-30 to -65	0 to 300	0	Long	CK1355P19A
CK1356P7	Radar Ind.	Electro.	Mag.	44°	10 $\frac{1}{4}$ "	3"	6.3	0.6	2 $\frac{5}{8}$ "	10,000	700	-180	0 to 300	0	Long	CK1356P7
CK1357P7A	Radar Ind.	Electro.	Mag.	66°	24 $\frac{1}{4}$ "	18 $\frac{3}{8}$ "	6.3	0.6	17 $\frac{3}{8}$ "	12,000	700	0 to -600	5500	0	Long	CK1357P7A
CK1358P7A	Radar Ind.	Electro.	Mag.	90°	18.38"	5 $\frac{1}{2}$ "	6.3	0.6	4 $\frac{1}{2}$ "	13,000	2750	-35 to -65	750	0	Long	CK1358P7A
CK1359P7A	Radar Ind.	Electro.	Mag.	52°	22 $\frac{1}{4}$ "	15 $\frac{1}{4}$ "	6.3	0.6	13 $\frac{3}{8}$ "	16,500	700	-28 to -72	0 to 300	0	Long	CK1359P7A
CK1360P7A	Radar Ind.	Electro.	Mag.	50°	13 $\frac{1}{2}$ "	7 $\frac{1}{8}$ "	6.3	0.6	6"	7000	300	-33 to -77	0 to 250	0	Long	CK1360P7A

NOTES: Most types are available in their metallized screen counterparts * Rectangular types indicated by height and width — All types listed available in all popular phosphors

STORAGE TUBES

TYPE	CONSTRUCTION	DEFLECTION	TYPICAL APPLICATION	FILAMENT			Anode 2	Anode 1	MAX. VOLTAGES		Collector	STORAGE SCREEN	MAX. CURRENT (Ma.)	RESOLUTION	CAP. OUTPUT (μ uf)	BASE	TYPE
				Volts	Amps.	Type			Grid 1	Decelerator							
QK411A	Cathode Ray	Electrostatic	Storage Tube	6.3	0.6	Oxide Cathode	6000	2800	+0 -200	500	500	500	0.3	400 TV lines	20	14 Pin Shell	QK11A4
RK6835 QK464A QK464B	Cathode Ray	Magnetic	Storage Tube	6.3	0.6	Oxide Cathode		6000	+0 -200	500	500	500	0.5	400 TV lines	20	12 Pin Small Shell	RK6835 QK464A QK464B
CK7576 QK 787	2-Gun Cathode Ray	Magnetic	Scan Conversion	6.3	0.6	Oxide Cathode	4000	4000	-125	600	600	600	0.5	900 TV lines	30	12 Pin Small Shell	CK75751 QK 787

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INDUSTRIAL TUBES

voltage regulator tubes

voltage reference tubes

radiation counter tubes

special purpose tubes

pencil tubes

low power transmitting tubes



VOLTAGE REGULATOR-VOLTAGE REFERENCE TUBES

TYPE	TYPICAL APPLICATION	MAX. DIMENSIONS Inches		MIN. STARTING VOLTAGE SUPPLY IN LIGHT	OPERATING VOLTAGE Approx.	MIN. OPERATING CURRENT ma.	MAX. OPERATING CURRENT ma.	MAX. REGULATION Volts	TYPE
		Height	Diam.						
0A2	Voltage Regulator	2 5/8	3/4	185	150	5	30	6	0A2
0A2WA	Voltage Regulator	2 5/8	3/4	165	150	5	30	5	0A2WA
0A3/VR75	Voltage Regulator	4 1/8	1 1/16	105	75	5	40	6.5	0A3/VR75
0B2	Voltage Regulator	2 5/8	3/4	133	108	5	30	3.5	0B2
0C2	Voltage Regulator	2 5/8	3/4	115	75	5	30	4.5	0C2
0B2WA	Voltage Regulator	2 5/8	3/4	133	108	5	30	3.0	0B2WA
0B3/VR90	Voltage Regulator	4 1/8	1 1/16	130	90	5	30	6	0B3/VR90
0C3/VR105	Voltage Regulator	4 1/8	1 1/16	133	105	5	40	4	0C3/VR105
0D3/VR150	Voltage Regulator	4 1/8	1 1/16	185	150	5	40	5.5	0D3/VR150
CK1022	Voltage Regulator	2 1 1/16	3/4	1100	1000	0.005	0.055	20	CK1022
CK1038	Voltage Regulator	1 5/8	0.400	930	900	0.005	0.055	15	CK1038
CK5651	Voltage Reference	2 3/8	3/4	115	82-92	1.5	3.5	3	CK5651
CK5651WA	Voltage Reference	2 3/8	3/4	115	82-88	1.5	3.5	2	CK5651WA
CK5783	Voltage Reference	1 1/2	0.400	115	82-92	1.5	3.5	3	CK5783
CK5783WA	Voltage Reference	1 1/2	0.400	115	83-89	1.5	3.5	3	CK5783WA
CK5783WB	Voltage Reference	1 1/2	0.400	115	83-89	1.5	3.5	3	CK5783WB
CK5787	Voltage Regulator	2 1/16	0.400	145	95-103	5	25	5	CK5787
CK5787WA	Voltage Regulator	2 1/16	0.400	141	95-103	5	25	3	CK5787WA
CK5787WB	Voltage Regulator	2 1/16	0.400	141	95-103	5	25	3	CK5787WB
CK5962	Voltage Regulator	2 1 1/16	3/4	750	700	0.002	0.055	15	CK5962
CK6073	Voltage Regulator	2 5/8	3/4	185	150	5	30	6	CK6073
CK6074	Voltage Regulator	2 5/8	3/4	133	108	5	30	4	CK6074
CK6213	Voltage Reference	1 3/8	0.400	200	127-133	1	2.5	2	CK6213
CK6437	Voltage Regulator	1 5/8	0.400	800	700	0.005	0.100	15	CK6437
CK6438	Voltage Regulator	1 5/8	0.400	1400	1200	0.005	0.100	20	CK6438
CK6542	Voltage Regulator	2 1/8	0.400	185	150	5	25	6	CK6542
CK6626/0A2WA	Voltage Regulator	2 5/8	3/4	165	150	5	40	5	CK6626/0A2WA
CK6627/0B2WA	Voltage Regulator	2 5/8	3/4	133	108	5	30	3.0	CK6627/0B2WA

RADIATION COUNTER (GEIGER-MUELLER) TUBES

(All glass, self-quenching)

TYPE	MAX. DIMENSIONS Inches		TERMINAL CONN.	OPERATING VOLTAGE Volts DC	PLATEAU LENGTH (minimum) Volts DC	RELATIVE PLATEAU SLOPE (maximum) Per 100V	GEIGER THRESHOLD Volts DC max.	TYPICAL BACKGRND Unshielded counts/min.	AMBIENT TEMPERATURE RANGE °C	WALL HEIGHT Nominal mg/sq. cm.	EFFICIENCY %	LIFE counts	TYPE
	Length	Diam.											
CK1018	8.25	0.81	8HA	925	150	3%	850	60	-40 to +55	35	90	10 ⁸	CK1018
CK1019	8.25	0.81	8HA	970	150	3%	880	60	-40 to +55	35	90	10 ⁸	CK1019
CK1020	6.0	0.75	9S	925	150	3%	850	60	-40 to +55	35	90	10 ⁸	CK1020
CK1021	5.25	0.66	9S	925	150	3%	850	60	-40 to +55	35	90	10 ⁸	CK1021
CK1023	5.0	0.75	5DB	925	150	3%	850	60	-40 to +55	35	90	10 ⁸	CK1023
CK1026	3.0	0.75	8HB	900	150	20%	760	60	-50 to +55	175		>10 ¹⁰	CK1026
CK1049	5.75	0.75	8HB	900	150	20%	760	150	-50 to +55	35		>10 ¹⁰	CK1049

SPECIAL PURPOSE TUBES

TYPE	CONSTRUCTION	TYPICAL APPLICATION	HTR or FILAMENT			MAX. DIMENSIONS Inches		PLATE VOLTS	GRID 1 VOLTS	GRID 2 VOLTS	GRID 3 VOLTS	PLATE CURR. ma.	GRID 2 CURR. ma.	AMP. FACT.	PLATE RESIST. meg.	MUT. COND. μ hos	OUT-PUT watts	LOAD. RESIST. ohms	TYPE	
			Volts	Amps.	Type	Height	Diam.													
1AE4	Pentode	R-F Amplifier	1.25	0.1	Fil	2 1/8	3/4	90	0	90	3.5	1.2		0.5	1550			1AE4		
3A4	Pentode	RF-AF Pwr. Amp.	1.4 2.8	0.2 0.1	Fil	2 1/8	3/4	150	-8.4	90	13.3	2.2		0.1	1900	0.7	8000	3A4		
3A5	Dble. Triode	AF-RF Amp. Osc.	2.8 1.4	0.11 0.22	Fil	2 1/8	3/4	90	-2.5		3.7		15		1800	(Each Unit)		3A5		
3B4	Beam Pentode	RF Amp. Osc.	2.5	0.165	Fil	2 1/8	3/4	90	Rg = 45K	90	15	4.8	(IC ₁ = 0.55 ma)			0.8 (at 100 Mc)	3B4			
6AJ5	Pentode	RF-AF Amplifier	6.3	0.175	Htr	1 3/8	3/4	28	Rk200	28	3	1.2		0.090	2750			6AJ5		
6AN5	Pentode	RF-AF Pwr. Amp.	6.3	0.45	Htr	2 3/8	3/4	120	Rk120	120	35	12		0.0125	8000	1.3	2500	6AN5		
6AR6	Pentode	Power Amp.	6.3	1.2	Htr	3 19/32	1 1/16	250	-22.5	250	75	5.0		0.021	5400			6AR6		
6AS6	Pentode	Mixer-Gated Amp.	6.3	0.175	Htr	1 3/4	3/4	120	-2	120	0	5.2	3.5		3200			6AS6		
6AS7G	Dble. Triode	DC Amplifier	6.3	2.5	Htr	5 5/16	2 1/16	135	Rk250		125		2.1		7500			6AS7G		
6J4	Triode	UHF Amplifier	6.3	0.4	Htr	2 1/8	3/4	150	Rk100		15.0		55		12000			6J4		
7AK7	Pentode	Mixer-Gated Amp.	6.3	0.8	Htr	3 3/32	1 3/16	150	0	90	0	40	21	0.0115	6500			7AK7		
954	Pentode	UHF Amplifier	6.3	0.15	Htr	1 3/8	1 3/32	250	-3	100	2	0.7		>1	1400			954		
955	Triode	UHF Oscillator	6.3	0.15	Htr	1 3/8	1 3/32	250	-7		6.3		25		2200			955		
956	Pentode	UHF Amplifier	6.3	0.15	Htr	1 3/8	1 3/32	250	-3	100	6.7	2.7		0.7	1800			956		
957	Triode	UHF Oscillator	1.25 6.3	0.05 0.3	Fil	1 3/8	1 3/32	135	-5		2		13.5		650			957		
12AY7	Dbl. Triode	Audio Amp.	12.6	0.15	Htr	2 3/16	7/8	250	-4		3		44		1750			12AY7		
CK1030	Spark Gap	Overvolt. Protect.				1 3/16	3/8	Breakdown Voltage = 1500 to 2000 volts; Min. External Imped. = 5000 ohms.												CK1030
CK1031	Spark Gap	Overvolt. Protect.				1 3/16	3/8	Breakdown Voltage = 3000 to 3500 volts; Min. External Imped. = 10,000 ohms.												CK1031
CK1033	Spark Gap	Overvolt. Protect.				1 3/16	3/8	Breakdown Voltage = 4200 to 4600 volts; Min. External Imped. = 10,000 ohms.												CK1033
CK1050	Gas Triode	Light Indicator	1.25	.280	Fil	1.25	3/16	65	-4.5	Indicator for Use in Computer Service										CK1050
CK5656	Dble. Tetrode	R-F Power Amp.	6.3	0.4	Htr	2 3/16	3/8	150	-2	120	15	2.7		0.06	5800	(Each Unit)		CK5656		
CK5687	Dble. Triode	Voltage Amp.	6.3 12.6	0.90 0.45	Htr	2 3/16	3/8	250 120	-12.5 -2		12.5 36		16.5 18.5		5500 11000	(Each Unit)		CK5687		
CK5691	Dble. Triode	Amplifier	6.3	.600	Htr	2 3/8	1 3/32	250	-2.0		2.3		70	0.044	1600			CK5691		
CK5692	Dble. Triode	Amplifier	6.3	.600	Htr	2 3/8	1 3/32	250	-9.0		6.5		20	0.009	2200			CK5692		
CK5693	Pentode	Amplifier	6.3	.300	Htr	2 3/8	1 3/16	250	-3.0	100	0	3.0	0.85		1650			CK5693		
CK5755	Dble. Triode	DC Amplifier	6.3 12.6	0.36 0.18	Htr	2 3/16	3/8	110	-0.95		0.15		70		500	(Each Unit)		CK5755		
CK5842	Triode	Amplifier	6.3	0.3	Htr	1 3/4	3/8	150			25		43		25,000			CK5842		
CK5847	Pentode	RF-IF Amp.	6.3	0.3	Htr	1 3/4	3/8	150		150	13.5	40		0.2	13,000			CK5847		
CK5881	Pentode	Power Amplifier	6.3	0.90	Htr	3 13/32	1 1/16	250	-14	250	75.0	4.3		0.30	6100	6.7	2500	CK5881		
CK5965	Dble. Triode	On-Off Computer Circuits	12.6 6.3	.225 .450	Htr	2 3/16	3/8	150	Rk220		8.2		47	0.007	6500			CK5965		
CK6080	Dble. Triode	Series Regulator	6.3	2.5	Htr	4 3/4	1 23/32	135	Rk250		12.5		2	28	7000			CK6080		
CK6136	Pentode	RF Amplifier	6.3	.300	Htr	2 3/8	3/4	250	Rk68	150	0	10.6	4.3	1.0	5200			CK6136		
CK6201	Dble. Triode	Amplifier	12.6 6.3	.150 .300	Htr	2 3/16	3/8	250	Rk200		10		60	.01	5500			CK6201		
CK6225	Pentode	RF Amplifier	6.3	.175	Htr	2 3/8	3/4	250	Rk100	150	0	7.4	2.9	1.0	4600			CK6225		
CK6336A	Triode	Power Amp.	6.3	0.15	Htr	4 3/8	2.07	190	Rk200				2.7		13,500			CK6336A		
CK6414	Dble. Triode	On-Off Control	6.3 12.6	0.3 0.175	Htr	2 3/8	3/8	180	-2.0				42.5		5500			CK6414		
CK6485	Pentode	R-F Amplifier	6.3	0.45	Htr	2 3/8	3/4	300	Rk160	150	0	10.0	2.5		9000			CK6485		
CK6550	Pentode	Power Amplifier	6.3	1.60	Fil	3 3/8	1 1/16	Max. Plate Voltage = 600; Output 70 watts.												CK6550
9001	Pentode	UHF Amplifier	6.3	0.15	Htr	1 3/8	3/4	250	-3	100	2	0.7		>1	1400			9001		
9002	Triode	UHF Oscillator	6.3	0.15	Htr	1 13/16	3/4	250	-7		6.3		25		2200			9002		
9003	Pentode	UHF Amplifier	6.3	0.15	Htr	1 3/4	3/4	250	3	100	6.7	2.7		0.7	1800			9003		
9005	Diode	Detector	3.6	0.165	Htr	1 3/8	3/8	Max. Plate Voltage (RMS) = 117v; Max. Ia = 1.0 ma.												9005
9006	Dble. Diode	Detector	6.3	0.15	Htr	1 3/4	3/4	Max. Peak Inverse = 750v; Max. Ia = 5 ma.												9006

PENCIUBES

TYPE	CON- STRUCTION	TYPICAL APPLICATION	HEATER		MAXIMUM DIMENSIONS (Inches)		MAXIMUM RATINGS			CLASS A CHARACTERISTICS					RF RATINGS					TYPE
															MAXIMUM RATINGS-OSC			Oscillator Power output		
			Volts	Amps.	Hgt.	Diam.	Plate Volts	Plate Curr. (μ a)	Plate Diss. watts	Plate Volts	Plate Curr. (ma.)	Cathode Resistor (ohms)	Mutual Cond. μ mhos	Ampl. Factor	Plate Volts	Plate Current (ma.)	Plate Diss. (watts)		Freq. (mc.)	
CK5675	Triode	RF Oscillator Amplifier	6.3	0.135	2.04	0.82	165	31	5.0*	135	24	68	6400	20	165	31	5.0*	up to 3000	475 mw at 1700 mc	CK5675
CK5876	Triode	RF Oscill.-Amp. Freq. Mult.	6.3	0.135	2.04	0.82	300	25	6.25*	250	18	75	6500	56	360	25	6.25*	up to 3000	3 watts at 500 mc	CK5876
CK5893	Triode	Plate Pulsed CW Oscill.-Amp.	6.0	0.330	2.06	0.82	330	35	7.0*	200	25	100	6000	27	1750 Peak	3.0 amps Peak	6.0*	3300	1200 watts Peak	CK5893

*If plate dissipation exceeds 2.5 watts, special precautions must be taken to cool anode externally.

TRANSMITTING TUBES

TYPE	CONSTRUCTION	TYPICAL APPLICATION	FILAMENT			MAXIMUM VOLTAGES				MAX. CURRENT MA.			POWER — WATTS			CAPACITANCES			BASE	TYPE
			Volts	Amps.	Type	Plate	Grid 1	Grid 2	Grid 3	Plate	Grid 1	Grid 2	Dissi- pation	Drive	Output	G-P	Input	Output		
2E24	Beam Pentode	VHF Oscil.- Amp.	6.0	0.65	Oxide	600	-175	200		85	3.5	12.5	13.5	2.0	16.5	0.11	8.5	6.5	Octal	2E24
2E26	Beam Pentode	VHF Oscil.- Amp.	6.0	0.8	Cathode	600	-175	200		75	3.5	12.5	13.5	0.17	27	0.20	13	7	Octal	2E26
2E30	Beam Pentode	RF-AF Amplifier	6.0	0.65	Fil	250	-150	250	0	60	3		10	0.2	7.5	0.18	9.6	1.4	7-Pin Min.	2E30
RK4D22	Beam Tetrode	R-F Oscillator- Amp.	25.2 12.6	0.8 1.6	Cathode	600	-200	350		300	15	35	50	1.5	135	0.27	28.0	13.0	Spec. 7-Pin	RK4D22
RK4D32	Beam Tetrode	R-F Oscillator- Amp.	6.3	3.75	Cathode	600	-200	350		300	15	35	50	1.5	135	0.27	28.0	13.0	Spec. 7-Pin	RK4D32
RK715C	Tetrode	Pulse Modulator	27.0	2.15	Cathode	18000	-1000	1350		15 amp.			60			1.1	38	7	Spec. 4-Pin	RK715C
RK807	Beam Tetrode	R-F Oscil.- Amp.	6.3	0.9	Heater	600	-200	300		100	5	12	30	0.2	50	0.2	11.0	7.0	Med. 5-Pin	RK807
RK811A	Triode	RF-AF Amplifier	6.3	4	Fil	1500	-200			175	50		65	7.1	200	5.6	5.9	0.7	4-Pin	RK811A
RK812A	Triode	RF-AF Amplifier	6.3	4	Fil	1500	-200			175	35		65	6.5	190	5.5	5.4	0.77	4-Pin	RK812A
RK813	Beam Tetrode	R-F Oscil.- Amp.	10.0	5	Thoriated	2250	-300	400		225	30	55	125	4.0	375	0.25	16.3	14	Giant 7-Pin	RK813
RK814	Beam Tetrode	R-F Oscil.- Amp.	10.0	3.25	Thoriated	1250	-300	300		150	15	34	65	1.5	130	0.12	13.0	10.0	Med. 5-Pin	RK814
RK829B	Dual Beam Tetrode	R-F Oscil.- Amp.	12.6	1.125	Cathode	750	-175	225		240*	15*	30*	40*	0.8*	87*	0.12	14.5	7.0	Med. 7-Pin	RK829B
RK832A	Dual Beam Tetrode	R-F Oscil.- Amp.	6.3	0.8	Cathode	750	-100	250		90	6	20	15	0.19	26	0.05	7.5	3.8	Spec. 7-Pin	RK832A
RK833A	Triode	Oscil.-Amp.	10.0	10.0	Fil	4000				0.5 amps.			450	35	1600				Spec.	RK833A
RK837	R-F Pentode	R-F Oscil.- Amp.	12.6	0.7	Heater	500	-200	200	+40	80	8	40	12	0.4	22	0.2	16.0	10.0	Med. 7-Pin	RK837
1614	Beam Pentode	RF-AF Amplifier	6.3	0.9	Heater	375	-125	300		110	5	10	21	0.1	21	0.4	10	12	Octal 7-Pin	1614
RK1625	Beam Tetrode	R-F Oscil.- Amp.	12.6	0.45	Cathode	600	-200	300		100	5	12	30	0.2	40	0.2	11	7	Med. 7-Pin	RK1625
CK5763	Beam Pentode	R-F Oscil.- Amp.	6.0	0.75	Heater	300	-125	250	0	50	5	15	12	0.35	8	0.3	9.5	4.5	9-Pin Min.	CK5763
CK6146	Beam Pentode	RF-AF Amp.	6.3	1.25	Heater	600	-150	250		150	4		25	0.3	69	0.22	13.5	9	Octal	CK6146

*Indicates value for both sections combined.

CK5889	Pentode	Electrometer	1.25	7.5	Fil	1.6	Dia. = .400		12	-2.0	4.5	0.005	0.005	18	14	Max. $I_{c1} = 3 \times 10^{-15}$ amp.		CK5889	
CK5971	Triode	Amp.-Osc.	1.25	80	Fil	1.5	.385	.285	67.5	Rg = 5 meg		3.5	23		2100		CK5971		
CK5972 ¹	Pentode	R-F Amplifier	1.25	60	Fil	1.5	.385	.285	67.5	Rg = 2 meg	67.5	2.5	0.8	1.0	1300		CK5972 ¹		
CK5975	Triode	Amp.-Osc.	6.3	175	Htr	1.5	Dia. = .400		100	Rk270		10	17.5		5100		CK5975		
CK5995	Diode	HW Rectifier	6.3	300	Htr	1.75	Dia. = .400		Max. peak inverse voltage = 850 Max. DC output current = 45 ma.		Max. peak plate current per plate = 275 ma. Average tube drop volts = 25		Base = flex. leads			CK5995			
CK6021 ⁷	Dble. Triode	Voltage Amp.	6.3	300	Htr	1 3/4	Dia. = .400		100	Rk150		6.5	35		5400 (Each Unit)		CK6021 ⁷		
CK6029	Triode	UHF Osc.	1.25	200	Fil	1.5	.385	.285	90	-4		11	8.5		2000		CK6029		
CK6050	Triode	UHF Osc.	1.25	120	Fil	1.5	.385	.285	135	-5		4.0	15		1600		CK6050		
CK6088	Pentode	Power Amp.	1.25	20	Fil	1.5	.385	.285	45	-1.25	45	0.675	0.150	0.7	560	10.5	0.2	CK6088	
CK6110 ⁷	Dble. Diode	Detector	6.3	150	Htr	1 3/4	Dia. = .400		Max. Inverse Peak Voltage = 420v		Max. $I^c = 4$ ma. per plate						CK6110 ⁷		
CK6111 ⁷	Dble. Triode	Voltage Amp.	6.3	300	Htr	1 3/4	Dia. = .400		100	Rk220		8.5	20		5000 (Each Unit)		CK6111 ⁷		
CK6112 ⁷	Dble. Triode	Voltage Amp.	6.3	300	Htr	1 3/4	Dia. = .400		100	Rk500		0.8	70		1800 (Each Unit)		CK6112 ⁷		
CK6152	Triode	Amp.-Osc.	6.3	200	Htr	1.5	Dia. = .400		100	Rk270		10	17.5		5100		CK6152		
CK6213	Gas Diode	Voltage Ref.			Cold	1 3/4	Dia. = .400		Min. starting voltage supply in light = 200		Operating voltage approx. = 127-133		Min. operating current ma. = 1		Max. operating current ma. = 2.5		Max. regulation volts = 2		CK6213
CK6245	Pentode	UHF Amplifier	6.3	200	Htr	1.50	Dia. = .400		20	0	30	0	2.5	1.0	3275		CK6245		
CK6281 ¹	Pentode	R-F Amplifier	0.625	20	Fil	1.25	.385	.285	22.5	Rg = 5 meg	22.5	Rg = 5 meg	Rg 2 = 2.7 meg		37 ⁴	1	CK6281 ¹		
CK6286	Triode	Osc.-Amp.	1.25	125	Fil	1.5	.385	.285	67.5	-2		6.0	11.5		2100		CK6286		
CK6397 ⁴	Beam Pent	R-F Pwr Amp. Doubler	1.25	125	Fil	1.60	Dia. = .400		125	-7.5	125	7.25	1.2		1950		CK6397 ⁴		
CK6418	Pentode	Power Amp.	1.25	10	Fil	1.25	.290	.235	22.5	-1.2	22.5	0.24	0.06	0.42	300	2.2	0.1	CK6418	
CK6419	Pentode	Voltage Amp.	0.625	10	Fil	1.0	.290	.235	15	-0.625	15	Reg = 10 meg	Coupled to 10 meg load Rg 2 = 3.3 meg		27 ⁴	2.2	CK6419		
CK6436	Gas Diode	H W Rectifier			Cold	1 3/4	Dia. = .400		Max. peak inverse voltage = 1,500		Max. peak plate current per plate = 10 ma.		Max. DC output current = 100 μ a		Average tube drop volts = 100		Base = flex leads		CK6436
CK6437	Gas Diode	Volt. Regulator			Cold	1 3/4	Dia. = .400		Min. starting voltage supply in light = 800		Operating voltage approx. = 700		Min. operating current ma. = 0.005		Max. operating current ma. = 0.100		Max. regulation volts = 15		CK6437
CK6438	Gas Diode	Volt. Regulator			Cold	1 3/4	Dia. = .400		Min. starting voltage supply in light = 1400		Operating voltage approx. = 1200		Min. operating current ma. = 0.005		Max. operating current ma. = 0.100		Max. regulation volts = 20		CK6438
CK6519	Pentode	Power Amp.	1.25	10	Fil	1.25	.290	.235	22.5	Rg = 10 meg	22.5	.375	0.40	0.10	0.3	425	450	1.5	CK6519
CK6526	Pentode	Power Amp.	1.25	125	Fil	1.5	.385	.285	110	-6	110	6.5	1.15		1900	375	0.01	CK6526	
CK6540	Pentode	R. F. Amplifier	6.3	200	Htr	1.5	Dia. = .400		120	Rk220	120	0	7.5	2.6	0.34	5000		CK6540	
CK6542	Gas Diode	Volt. Regulator			Cold	2.5	Dia. = .400		Min. starting voltage supply in light = 185		Operating voltage approx. = 150		Min. operating current ma. = 5		Max. operating current ma. = 25		Max. regulation volts = 6		CK6542
CK6611	Pentode	R-F Amplifier	1.25	20	Fil	1.5	.385	.285	30	Rg = 5 meg	30	1.0	.350	0.4	1000		CK6611		
CK6612	Pentode	R-F Amplifier	1.25	80	Fil	1.5	.385	.285	30	Rg = 2 meg	30	3.0	1.0	0.18	3000		CK6612		
CK6659	Gas Diode	H W Rectifier			Cold	2 1/4	Dia. = .400		Max. peak inverse voltage = 2800		Max. peak plate current per plate = 40 ma.		Max. DC output current = 8 ma.		Average tube drop volts = 100		Base = flex. leads		CK6659
CK6814	Triode	Volt. Amp.	6.3	15	Htr	1 3/4	Dia. = .400		100	Rk150		10	29	.0048	6000		CK6814		
CK6832 ⁷	Dble. Triode	D-C Amplifier	6.3	400	Htr	1.50	Dia. = .400		100	Rk3000		0.75	26	0.026	1000		CK6832 ⁷		
CK6872	Pentode	R-F Amplifier	6.3	200	Htr	1.50	Dia. = .400		120	Rk200	120	0	7.75	2.7	4100		CK6872		
CK6932	Pentode	Mixer Gated Amp.	1.25	20	Fil	1.625	Dia. = .400		45	-1.25	45	0	.56	.32	475		CK6932		
CK6999	Pentode	Power Amp.	1.32	10	Fil	1 1/2	Dia. = .295 x .385		67.5	4.5	67.5	5	1.2		1800		CK6999		
CK7576	Triode	RF Power Amp.	6.3	450	Htr	1.750	Dia. = .400		200			15	44		10,500		CK7576		

¹ Fully shielded by metallic coating. ² Leads are 0.016" diameter and 0.200" long. ³ Conversion Conductance. ⁴ Voltage Gain (ratio). ⁵ Space-Charge tube, given in cascade gain.

⁶ Filament center-tap provided for 1.25 or 2.5 volt operation. Type is designed for intermittent service operation. ⁷ This type has an 8-lead subminiature button base.

This data is compiled as a Raytheon service to the Field, it is not intended to indicate type availability.



SUBMINIATURE TUBES

TYPE	CON- STRUCTION	TYPICAL APPLICATION	HTR or FILAMENT			MAX. DIMENSIONS Inches			PLATE VOLTS	GRID 1 VOLTS	GRID 2 VOLTS	GRID 3 VOLTS	PLATE CURR. ma.	GRID 2 CURR. ma.	AMP. FACT.	PLATE RESIST. meg.	MUT. COND. μmhos	OUTPUT milliwatts or Voltage Gain (4)	LOAD RESIST. meg.	TYPE				
			Volts	Ma.	Type	Length	Width	Thick- ness																
1AD4 ¹	Pentode	R-F Amplifier	1.25	100	Fil	1.5	.385	.285	45	Rg = 2 meg	45		3.0	0.9		0.5	2000			1AD4 ¹				
1AG4	Pentode	Power Amp.	1.25	40	Fil	1.5	.385	.285	41.4	-3.6	41.4		2.4	0.6		0.18	1000	35	0.012	1AG4 ¹				
1AG5	Diode-Pent.	Det.-Amplifier	1.25	30	Fil	1.5	.385	.285	45	-2	45		0.28	0.12		2.5	250			1AG5				
1AK4	Pentode	R-F Amplifier	1.25	2	Fil	1.5	.385	.285	45	5 meg			0.75			1.5	750			1AK4				
2E31 ¹ 2E32 ¹⁻²	Pentode	R-F Amplifier	1.25	50	Fil	1.5	.400	.285	22.5	Rg = 5.0 meg	22.5		0.4	0.3		0.35	500			2E31 ¹ 2E32 ¹⁻²				
2E35 2E36 ²	Pentode	Power Amp.	1.25	30	Fil	1.5	.400	.285	45	-1.25	45		0.45	0.11		0.25	500	6	0.1	2E35 2E36 ²				
2G21 2G22 ²	Triode-Hept.	Converter	1.25	50	Fil	1 1/8	.400	.285	22.5	Rg = 0.05 meg	22.5	0	0.2	0.3		0.5	60 ³	Eb Triode = 22.5 1b Triode = 1 ma		2G21 2G22 ²				
CK501AX	Pentode	Voltage Amp.	1.25	30	Fil	1.5	.385	.285	30	Rg = 5 meg	30	Rg = 5 meg	Rg 2 = 3 meg					45 ⁴	1	CK501AX				
CK502AX	Pentode	Power Amp.	1.25	30	Fil	1.5	.385	.285	45	-1.25	45		.45	.11		.10	500			CK502AX				
CK510AX	Dble. Tetr.	Voltage Amp.	0.625	50	Fil	1.25	.400	.285	30	Rg = 5 meg		Rg = 5 meg						Coupled to 5 meg load Rg 2 = 0.2 meg	150 ⁵	2	CK510AX			
CK512AX	Pentode	Voltage Amp.	0.625	20	Fil	1.25	.385	.285	22.5	Rg = 5 meg	22.5	Rg = 5 meg						Coupled to 5 meg load Rg 2 = 2.7 meg	37 ⁴	1	CK512AX			
CK526AX	Pentode	Power Amp.	1.25	20	Fil	1.5	.385	.285	22.5	-1.5	22.5		0.525	0.135		0.22	425	3.75	0.05	CK526AX				
CK527AX	Pentode	Power Amp.	1.25	15	Fil	1.5	.385	.285	22.5	Rg = 5 meg	22.5		0.1	0.025		1.8	225	0.75	0.3	CK527AX				
CK528AX ¹	Pentode	Power Amp.	1.25	20	Fil	1.5	.385	.285	45	-1.25	45		0.675	0.150		0.7	560	10.5	0.2	CK528AX ¹				
CK529AX ¹	Pentode	Power Amp.	1.25	20	Fil	1.5	.385	.285	15	-1.25	15		0.32	0.075		0.3	350	1.6	0.05	CK529AX ¹				
CK531DX	Pentode	Power Amp.	1.25	20	Fil	1.25	.290	.235	15	-1.5	15		0.3	0.090		0.25	250	1.67	0.06	CK531DX				
CK532DX	Pentode	Power Amp.	1.25	15	Fil	1.25	.290	.235	22.5	Rg = 10 meg	22.5		0.4	0.125		0.18	450	1.7	0.1	CK532DX				
CK533AX	Pentode	Power Amp.	1.25	15	Fil	1.5	.385	.285	22.5	Rg = 5 meg	22.5		0.36	0.090		0.5	400	1.8	0.075	CK533AX				
CK534AX	Pentode	Voltage Amp.	0.625	15	Fil	1.25	.385	.285	15	-0.625	15							Coupled to 5 meg load Rg = 5 meg Rg 2 = 1.5 meg	24 ⁴	1	CK534AX			
CK535AX	Pentode	Power Amp.	1.25	20	Fil	1.5	.385	.285	15	-1.25	15		0.32	0.075		0.3	350	1.6	0.05	CK535AX				
CK536AX ¹	Pentode	Power Amp.	1.25	15	Fil	1.5	.385	.285	22.5	Rg = 5 meg	22.5		0.36	0.090		0.5	400	1.8	0.075	CK536AX ¹				
CK539DX	Pentode	Power Amp.	1.25	15	Fil	1.25	.290	.235	22.5	-1.4	22.5		0.25	0.075		0.25	300	2.2	0.1	CK539DX				
CK542DX	Pentode	Power Amp.	1.25	15	Fil	1.25	.290	.235	22.5	-2.0	22.5		0.425	0.13		0.15	325	3.75	0.05	CK542DX				
CK542DXS ¹	Pentode	Power Amp.	1.25	15	Fil	1.25	.290	.235	22.5	-2.0	12.5		0.425	0.13		0.15	325	3.75	0.05	CK542DXS ¹				
CK547DX	Pentode	Power Amp.	1.25	10	Fil	1.25	.290	.235	30	Rg = 10 meg	30		0.240	0.06		0.75	425	1.35	0.2	CK547DX				
CK1053	Electrolytic Diode	Elapsed Time Indicator				1.50		Dia. = .400	Max. indication μa-hrs. operating current range 1-100 μa														CK1053	
CK5643	Gas Tetradode	Control Circuits	6.3	15	Hrs.	1.375		Dia. = .400	Max. peak inverse anode, volts = 500 Max. peak cathode current = 100 ma. Max. average cathode current = 16 ma.															CK5643
CK5676	Triode	UHF Osc.	1.25	120	Fil	1.5	.385	.285	135	-5			4.0		15		1600			CK5676				
CK5678 ¹	Pentode	R-F Amplifier	1.25	50	Fil	1.5	.385	.285	67.5	5 meg	67.5		1.8	0.48		1.0	1100			CK5678 ¹				
CK5785	Diode	HW Rectifier	1.25	15	Fil	1.5	.400	.300	Max. peak inverse voltage = 3500 Max. peak plate current per plate = 450 μa Max. DC output current = 100 μa Average tube drop volts = 17 Base = flex. leads													CK5785		
CK5854	Pentode	Power Amp.	1.25	30	Fil	1.5	.385	.285	45	-2.0	45		0.8	0.25		0.35	550	9.5	0.05	CK5854				
CK5875 ¹	Pentode	Radiosonde	1.25	100	Fil	1.5	.385	.285	90	0	90		3.5	0.9			2500			CK5875 ¹				
CK5886	Pentode	Electrometer	1.25	10	Fil	1.5	.400	.285	10	5.0	Triode Conn.		0.2		1.8		160			Max. Ic ¹ = 2.5x10 ⁻¹³ amp. CK5886				

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POWER TUBES

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MODULATORS - OSCILLATORS - AMPLIFIERS - RECTIFIERS

TYPE	CLASS	CATHODE		AF	MAXIMUM ANODE RATINGS				FULL INPUT FREQUENCY MCS	COOLING	
		VOLTS	AMPS	Mu	VOLTS	AMPS	INPUT WATTS	DISS. WATTS			
ML-2C39A	UHF Tri	6.3	1.0	100	1000	0.125†	125	100	2500	FORCED AIR	
ML-2C39WA	UHF Tri	5.8	1.0	100	1000	.125†	100	100	2500	FORCED AIR	
ML-2C41	UHF Tri	6.3	1.03	100	3500†	4.0†	35	35	3000	FORCED AIR	
ML-3CX100A5	UHF Tri	6.0	1.00	—	1000	.125	6	100	2900	FORCED AIR	
ML-102A	H Vac	20.	19.0	ANODE INV PKV 75, PEAK MA 750				PLATE DISSIPATION 750 WATTS		CONVECTION	
ML-141	H Vac	5.5	6.5	ANODE INV PKV 125, PEAK MA 750				PLATE DISSIPATION 100 WATTS		RADIATION	
ML-142	H Vac	3.8	6.6	ANODE INV PKV 100, PEAK MA 250				PLATE DISSIPATION 25 WATTS		CONVECTION	
ML-148	H Vac	5.7	6.6	ANODE INV PKV 150, PEAK MA 1000				PLATE DISSIPATION 60 WATTS		CONVECTION	
ML-199	H Vac	12	23	ANODE INV PKV 110, PEAK MA 10000				PLATE DISSIPATION 1500 WATTS		CONVECTION	
ML-212E	Tri	14	6.0	16	3000	.350	—	275	1.5	RADIATION	
ML-220C	Tri	21.5	41	40	15000	1.5	—	10000	4	WATER	
ML-220CA	Tri	21.5	41	40	15000	1.5	—	5000	4	FORCED AIR	
ML-222A	Vac	21.5	41	ANODE INV PKV 25, PEAK AMPS						WATER	
ML-241B	Tri	14	6.0	16	3000	.350	—	275	7.5	RADIATION	
ML-242C	Tri	10.	3.25	12.5	1250	.150	188	100	6	RADIATION	
ML-279A	Tri	10.	21.	10	3000	.800	—	1200	20	RADIATION	
ML-298A	Tri	27	225	32	20000	11.	—	100000	4	WATER	
ML-322	UHF-Diode	6.3	.95	ANODE INV PKV .8, PEAK MA 600				AV PLATE DISSIPATION 15 WATTS		CONVECTION	
ML-342A	Tri	20.0	67	40	20000	2.5	—	25000	4	WATER	
ML-342AA	Tri	20.0	67	40	20000	2.5	—	5000	4	FORCED AIR	
ML-343A	Tri	21.5	57.5	40	18000	2.	—	10000	4	WATER	
ML-343AA	Tri	21.5	57.5	40	18000	1.5	—	5000	4	FORCED AIR	
ML-354	Tri	12.0	220.	25	15000	12.	150000	75000	20	WATER	
ML-356/5771	Tri	7.5	170.	20	12500	6.0	60000	22500	25	WATER	
ML-357B	Tri	10.0	10.	30	4000	0.5	1800	400	100	RADIATION	
ML-379A	Tri	10.0	21.	10	3000	.800	—	1200	20	RADIATION	
ML-857B	HG Vap	5.0	30.	—	22000	20.	—	—	—	CONVECTION	
ML-869B	HG Vap	5.0	19.0	—	ANODE INV PKV 20, PEAK AMPS 20				—	—	CONVECTION
ML-880	Tri	12.6	315.	20	10500	6.0	60000	20000	25	WATER	
ML-889A	Tri	11.0	120.	21	8500	2.	16000	5000	50	WATER	
ML-889RA	Tri	11.0	120.	21	8500	2.	16000	5000	50	FORCED AIR	
ML-891	Tri	22.0	60.	8.5	12000	2.0	18000	6000	1.6	WATER	
ML-891R	Tri	22.0	60.	8.5	10000	2.0	15000	4000	1.6	FORCED AIR	
ML-892	Tri	22.0	60.	50	15000	2.0	30000	10000	1.6	WATER	
ML-892R	Tri	22.0	60.	50	12500	2.0	18000	4000	1.6	FORCED AIR	
ML-893A	Tri	20.0	183.	34.5	20000	4.0	70000	20000	5	WATER	
ML-893AR	Tri	20.0	183.	34.5	20000	4.0	70000	20000	5	FORCED AIR	
ML-5530	Tri	5.0	55	26	5000	1.75	8750	4000	110	FORCED AIR	
ML-5530H	Tri	5.0	55	26	8500	1.75	10000	4000	30	FORCED AIR	
ML-5531	Tri	6.3	92	24	10500	3.75	30000	10000	30	FORCED AIR	
ML-5541	Tri	7.5	57	26	8500	2.75	23000	10000	110	FORCED AIR	
ML-5575/100	H Vac	20.0	24	ANODE INV PKV 150, PEAK MA 1000				PLATE DISSIPATION 750 WATTS		CONVECTION	
ML-5576/200	H Vac	20.0	32	ANODE INV PKV 150, PEAK MA 2500				PLATE DISSIPATION 1000 WATTS		CONVECTION	
ML-5604	Tri	11.0	176	19.5	12,500	3.0	32500	10000	25	FORCED AIR	

Class Symbols
 Tri : Triode
 Tet : Tetrode
 Pent : Pentode
 PM : Pulse Modulator (Shielded Grid)
 UHF : Ultra High Frequency

SW : Switch
 H Vac : High Vacuum
 Hg Vap : Mercury Vapor
 IO : Image Orthicon
 Vid : Vidicon
 SD : Storage Display
 D : Display

TYPE	CLASS	CATHODE		AF Mu	MAXIMUM ANODE RATINGS				FULL INPUT FREQUENCY MCS	COOLING
		VOLTS	AMPS		VOLTS	AMPS	INPUT WATTS	DISS. WATTS		
ML-5606	Tri	22.0	60	50	14000	2.0	25000	10000	1.6	WATER
ML-5619	Tri	11.0	176	19.5	12500	3.0	32500	20000	25	WATER
ML-5658	Tri	12.0	310	20	12500	5.0	60000	20000	15	WATER
ML-5666	Tri	11.0	120	21	10000	2.0	20000	12500	22.5	WATER
ML-5667	Tri	11.0	120	21	10000	2.0	20000	7500	22.5	FORCED AIR
ML-5668	Tri	22.0	60	50	14000	2.0	28000	20000	5	WATER
ML-5669	Tri	22.0	60	50	14000	2.0	28000	10000	5	FORCED AIR
ML-5681	Tri	12.0	220	25	15000	12.0	150000	75000	30	WATER
ML-5682	Tri	16.5	325	30	16000	20.0	300000	120000	30	WATER
ML-5736	Tri	6.0	60	22	5000	1.4	5000	2500	60	FORCED AIR
ML-6256	Tri	12.6	27	21	5500	1.5	7000	5000	110	WATER
ML-6257	Tri	12.6	27	21	5500	1.5	7000	5000	110	WATER
ML-6258	Tri	12.6	27	21	5500	1.5	7000	3000	110	FORCED AIR
ML-6420	Tri	7.0	85	20	10000	2.2	20000	12500	30	WATER
ML-6421	Tri	7.0	85	20	10000	2.2	20000	10000	30	FORCED AIR
ML-6421F	Tri	7.0	85	20	10000	2.2	20000	7500	30	FORCED AIR
ML-6422	Tri	7.0	85	90	12500	2.5	30000	20000	30	WATER
ML-6423	Tri	7.0	85	90	12500	2.5	30000	12500	30	FORCED AIR
ML-6423F	Tri	7.0	85	90	12500	2.5	30000	10000	30	FORCED AIR
ML-6424	Tri	7.0	120	20	12500	3.5	40000	20000	30	WATER
ML-6425	Tri	7.0	120	20	12500	3.5	40000	12500	30	FORCED AIR
ML-6425F	Tri	7.0	120	20	12500	3.5	40000	10000	30	FORCED AIR
ML-6426	Tri	8.0	200	20	12500	8.0	80000	40000	30	WATER
ML-6427	Tri	8.0	200	20	12500	8.0	80000	20000	30	FORCED AIR
ML-6442	UHF Tri	6.3	0.9	50	3000†	2.5†	7.5	7.5	2500	FORCED AIR
ML-6544	PM Tri	6.0	60	90	HOLD-OVER VOLTAGE 20,000, CURRENT AMPS 75			1000	—	FORCED AIR
ML-6576	Tri	7.5	170	5.5	12000	5.0	45000	22500	25	WATER
ML-6623	Tri	6.0	60	22	5000	1.4	5000	2500	30	FORCED AIR
ML-6696	Tri	13.0	205	20	16000	11	120000	60000	30	WATER
ML-6697	Tri	13.0	205	20	16000	11	120000	35000	30	FORCED AIR
ML-6908	HV AC	12.0	23	—	ANODE INV PRV 150, PEAK MA 10000, PLATE DISSIPATION 2000 WATTS				—	{ RADIATION { CONVECTION
ML-7002	PM Tri	6.0	85	300	HOLD-OFF VOLTAGE 60000, CURRENT AMPS 60			2000	—	OIL
ML-7003	PM Tri	8.5	60	200	HOLD-OFF VOLTAGE 40000, CURRENT AMPS 60			3000	—	FORCED AIR
ML-7007	Tet	5.0	170	10	6500	4	24000	10000	220	FORCED AIR
ML-7120	Tri	7.0	85	4.4	10000	2.2	20000	12500	30	WATER
ML-7121	Tri	7.0	85	4.4	10000	2.2	20000	10000	30	FORCED AIR
ML-7124	Tri	8.0	200	4.4	12500	8.0	80000	40000	—	WATER
ML-7125	Tri	8.0	200	4.4	12500	4.5	55000	20000	—	FORCED AIR
ML-7209	UHF Tri	6.0	1.0	100	3500	0.01*	35	35	3000	FORCED AIR
ML-7210	UHF Tri	6.3	0.85	75	3500†	3.0†	26	26	3000	FORCED AIR
ML-7211	UHF Tri	6.3	1.23	80	3000†	6.0	36	40	2500	FORCED AIR
ML-7248	SW Tet	6.3	11.7	—	HOLD-OFF VOLTAGE 125000, CURRENT AMPS 2			200	—	OIL
ML-7249	SW Tet	6.3	11.7	—	HOLD-OFF VOLTAGE 125000, CURRENT AMPS 2			300	—	{ FORCED AIR { OIL
ML-7333	PM Tri	6.0 ± 5%	16	175	20000	18	—	60	—	RADIATION
ML-7335	PM Tri	6.0 ± 5%	70	125	{ 16000 { 8000	{ 60 { 10	—	{ 1000 { 3000	—	{ CONVECTION { WATER

PHOTOSENSITIVE AND STORAGE TUBES

TYPE	CLASS	PHOTOCATHODE SIZE DIAGONAL	DEFLECTION METHOD	SPECTRAL RESPONSE	SIGNAL OUTPUT	GRID VOLTAGE					
						G ₁	G ₂	G ₃	G ₄	G ₅	G ₆
ML-5820	I.O.	1.8 "	Magnetic	S-10	3-24μA	-24 to -110	300	250 to 330	140 to 180	0 to 125	-300 to -405
ML-6198	Vid	.625"	Magnetic	S-18	.1-2μA	125	350	350	350	—	—
ML-7038A	Vid	.625"	Magnetic	S-18	.1-.3μA	125	300	350	350	—	—
ML-7291A	Vid	.625"	Magnetic	S-18	.1-.3μA	125	350	350	350	—	—
ML-7351	Vid	.625"	Magnetic	{ 6000A { (peak)	.1-.32μA	125	350	350	350	—	—
	CLASS	DIAMETER	DEFLECTION METHOD	STORAGE	PHOSPHOR	MAXIMUM VOLTAGES					
						FIRST	SECOND	SCREEN			
ML-6577	3D	5"	Electro-Static	Bistable	Pi (Any)	-3,400	300	4,000			
ML-C19K	D	19"	Magnetic	No	Usually P11 P14	1,300	3,600	15,000			

NOTES: A.F. — Amplification Factor
‡ — D.C. Cathode Current

* — Duty Cycle: 0.0033
† — Duty Cycle: 0.0025 Max.