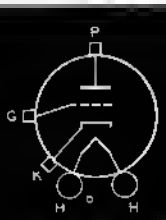
TUBES FOR UHF APPLICATIONS

RCA Type	Description
PENCIL TUBES	
5675	Medium-Mu Triode. For use in cathode-drive service as a class C rf power amplifier and oscillator. Useful up to 3000 Mc.
5876	General-Purpose, High-Mu Triode. For use in cathode-drive circuits as an rf amplifier, if amplifier, or mixer tube in receivers operating at frequencies up to 1000 Mc; as a frequency multiplier up to about 1500 Mc, and as an oscillator up to 1700 Mc.
5876-A	High-Mu Triode. Like the 5876 but intended for military and critical industrial applications.
5893	Medium-Mu Triode. For cathode-drive service as a plate-pulsed oscillator up to 3300 Mc. May also be used as an rf power amplifier, cw oscillator, or frequency doubler up to 1000 Mc.
6263	Medium-Mu Triode. Has external plate radiator. For use in cathode-drive service as an rf power amplifier and oscillator at frequencies up to 1700 Mc. Can be used in mobile equipment, and in aircraft transmitters at altitudes up to 60,000 feet without pressurized chambers.
6264-A	Medium-Mu Triode. Like the 6263 but has a mu of 40. Especially useful as a frequency multiplier. Intended for military and critical industrial applications.
6562/ 5794-A	Fixed-Tuned Oscillator Triode. Has two resonators integral with tube. Intended for radiosonde applications at 1680 Mc.
7533	Tunable Oscillator Triode. Has two resonators integral with the tube. Intended for radiosonde applications between 1660 Mc and 1700 Mc.
7552	High-Mu Triode type with ceramic-metal seals. For use in cathode-drive service as a low noise uhf amplifier at frequencies up to 1000 Mc and above. For compact mobile and aircraft equipment at altitudes up to 100,000 feet without pressurization.
7554	High-Mu Triode type with ceramic-metal seals. For use at frequencies up to 3000 Mc in cathode-drive service as an uhf power amplifier, oscillator and frequency multiplier in compact mobile and aircraft equipment at altitudes up to 100,000 feet without pressurization.

The heater leads for the Pencil tubes with the exceptions of types 6562, 7533, 7552, and 7554 fit the Cinch Socket, No. 54A1635, or equivalent. Connections to the plate, grid, and cathode terminals require flexible spring contacts. The cathode of the 6562 is externally connected to one of the heater leads.

G terminals nearer filament leads; P terminals nearer bulb tip.

G caps nearer base; P caps nearer bulb tip.



5675 5876 5876-A 5893
6263 6264-A 7552 7554

TUBES FOR UHF APPLICATIONS

Heater (H) or Filament Volts	Heater (H) or Filament Amp.	Max. Dimensions Inches Length	Max. Dimensions Inches Diam.	Amplification Factor	Class of Service	Max. Frequency for Full Input Mc	Max. Plate Ratings† Absolute Values Volts	DC Input Watts	Dissipation Watts	Typical Operating Conditions† Plate Volts	Grid Volts	Peak AF Grid-to-Grid Volts	Plate Amperes	Plate-to-Plate Load Ohms	Approx. Driving Power Watts	Approx. Power Output Watts	Type
PENCIL TUBES																	
6.3	0.135	2.252	0.816[aa]	20	C·T	—	300	9	9	120	−8	—	0.025	—	—	0.475	**5675**
						Oscillator at 1700 Mc→											
6.3	0.135	2.252	0.816[aa]	56	C·T	—	360	9	6.25	250	−2	—	0.023	—	—	0.75	**5876**
						Oscillator at 1700 Mc→											
					C·M	—	330	7.5	6.25	300	−70	—	0.017	—	2	2	
						Doubler to 960 Mc→											
For data refer to MIL-E-1/1043 (USAF) specification[xx]																	**5876-A**
6	0.28	2.297	0.816[aa]	27	Maximum Ratings for Plate-Pulsed Oscillator Service—Class C: Maximum "On" Time, 5 μsec in Any 5000 μsec Interval; Peak Positive-Pulse Plate Supply Volts, 1750; Peak Plate Amperes, 3; Plate Dissipation, 6 watts; Pulse Duration, 1.5 μsec												**5893**
6	0.28	2.63	1.01[bb]	27	• C·P	500	330	15	9	320	−52	—	0.035	—	2.4[m]	8[p]	**6263**
					• C·T	500	400	22	13								
						Oscillator at 500 Mc→				350	−35	—	0.04	—	—	7[p]	
						Rf Power Amp. at 500 Mc→				350	−58	—	0.04	—	3[m]	10[p]	
For data refer to MIL-E-1/1045 (USAF) specification[xx]																	**6264-A**
5.2 to 6.6	0.16 at 6.0 volts	3.256[c]	0.865[a]	—	C·T	Frequency (approx.), 1680 Mc. Frequency Adjustment Range, ±12 Mc; Max. Frequency Drift, +4 to −1 Mc; Plate-Voltage Range, 117 to 95 Volts; Ambient Temp. Range +22 to −40°C; Power Output (approx.), 600 mw												**6562/ 5794-A**
5.2 to 6.6	0.16 at 6.0 volts	3.23[c]	0.865[a]	—	C·T	Frequency (approx.), 1680 Mc; Frequency Adjustment Range, ±20 Mc; Max. Frequency Drift, +4 to −1 Mc; Plate-Voltage Range, 117 to 95 Volts; Ambient Temp. Range +22 to −40°C; Power Output (approx.), 575 mw												**7533**
6.3	0.225	1.62	0.557	70	A_1	1000	250	—	2.5	125	Cathode Resistor 50 ohms		0.014	Power Gain:[zz] 16.5 db. above 70 dbm; Noise Factor: 6.5 db			**7552**
						Amplifier at 500 Mc→											
6.3	0.225	1.62	0.557	70	C·T	1000	250[h]	—	2.5	203[h]	3π	—	0.024[yy]	—	—	1.3[p]	**7554**
						Oscillator at 1000 Mc→											
					C·M	1000	250[h]	—	2.5	218[h]	18π	—	0.021[yy]	—	0.8[m]	0.9[p]	
						Doubler to 1000 Mc→											

Note: To facilitate comparison between types, all ratings are given on an absolute-maximum basis.

† Unless otherwise specified, all values shown are for Continuous Commercial Service.

• Intermittent Commercial and Amateur Service.

[h] Plate-to-grid volts.

[π] Cathode-to-grid volts.

[a] Maximum radius.

[c] Excluding flexible leads.

[m] Driver power output.

[p] Useful power output.

[yy] Cathode current.

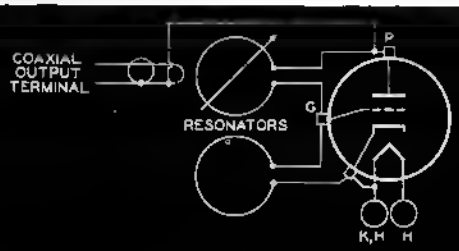
[zz] For bandwidth of 5 Mc.

[aa] Including grid flange.

[bb] Including radiator fin.

[xx] A copy of this specification may be obtained from the Commander, Wright-Patterson AFB, Attn., EWBFER, Wright-Patterson Air Force Base, Ohio.

EXPLANATION OF CLASS-OF-SERVICE ABBREVIATIONS

A_1 = Class A_1 RF Amplifier Service.
C·P = Class C Plate-Modulated Telephone Service.
C·M = Class C Frequency-Multiplier Service.
C·T = Class C Telegraph Service.

NOTE: In Classes of Service A_1, C·P, C·M, and C·T, the values shown under Maximum Plate Ratings and Typical Operating Conditions are for one tube.