

PENNSYLVANIA TUBES — AVERAGE CHARACTERISTICS

Type	Construction		Emitter			Note (1) (2) Capacitances in $\mu\mu\text{f}$.			Use	Plate Volts	Negative Grid Volts	Screen Volts	Plate Current Ma.	Screen Current Ma.	Plate Resistance Ohms	Transconductance Micromhos	Amplification Factor	Ohms Load for Stated Power Output	Power Output Milli-watts	Type
	Bulb Size or Style	Class	Basing Diag.	Type	Volts	Amps.	Cgp.	Cin-													Cout
12CS6	T-5½	Dual Control Heptode	7CH-0-0	Cathode	12.6	0.150	0.05m 0.36m	5.5 7.0	7.5	7.5	30	0.8 1.1	4.0	700,000 1.0 Meg.	950 Gr. #1 1,950 Gr. #3	Grid #3 Volts = 0 Grid #3 Volts = 1.0	.....	.....	12CS6
12CU5	T-5½	Pentode	7CV	Cathode	12.6	0.600	0.7*	13.2*	8.6*	Power Amp.	Characteristics Same as Type 6CU5. (12CU5 Designed for Series String TV Receivers.)	.....	.....	.....	.....	.....	.....	.....	12CU5
12CU6	T-12	Beam Amp.	6AM-0-0	Cathode	12.6	0.600	0.55*	15.0*	7.0*	Horiz. Amp.	Characteristics Same as Type 6BQ6G, Except Max. D.C. Plate Supply = 350 Volts. (12CU6 Designed for Series String TV Receivers.)	.....	.....	.....	.....	.....	.....	.....	12CU6
12DQ6	T-12	Pentode	6AM-0-0	Cathode	12.6	0.600	0.55*	15.0*	7.0*	Horiz. Def. Amp.	Characteristics Same as Type 6DQ6. (12DQ6 Designed for Series String TV Receivers.)	.....	.....	.....	.....	.....	.....	.....	12DQ6
12DQ6A	T-12	Pentode	6AM	Cathode	12.6	0.6	0.55*	15*	7*	Class A1 Amp. Horiz. Defl.	Characteristics Same as Type 6DQ6A. (12DQ6A Designed for Series String TV Receivers.)	.....	.....	.....	.....	.....	.....	.....	12DQ6A
12E5GT	T-9	Triode	6Q-1-0	Cathode	12.6	0.15	2.6	3.4	5.5	Amplifier	Characteristics Same as Type 6F5GT.	.....	.....	.....	.....	.....	.....	.....	12E5GT
12F5GT	T-9	Triode	5M-0-0	Cathode	12.6	0.15	2.8*	2.2*	3.2*	Amplifier	Characteristics Same as Type 6F5GT.	.....	.....	.....	.....	.....	.....	.....	12F5GT
12F8	T-6½	Duodi. Pent.	9FH	Cathode	12.6	0.150	0.06	4.5	3.0	Amplifier	Identical to One Section of Type 6SN7GT.	.....	.....	.....	.....	.....	.....	.....	12F8
12G4	T-5½	Triode	6BG	Cathode	12.6	0.15	3.4	2.6	3.2	Amplifier	.....	.....	.....	.....	.....	.....	.....	.....	12G4
12G8	T-6½	Duodiode	9CZ	Cathode	12.6	0.400	.....	.....	.....	Amplifier	.....	.....	.....	.....	.....	.....	.....	.....	12G8
12H4	T-5½	Triode	7DW	Cathode	6.3/ 12.6	0.3/ 0.15	3.4	2.6	3.2	Amplifier	.....	.....	.....	.....	.....	.....	.....	.....	12H4
12H6	Metal	Duodiode	7Q-1-1	Cathode	12.6	0.15	.....	.....	.....	Rectifier	Characteristics Same as Type 6H6.	.....	.....	.....	.....	.....	.....	.....	12H6
12J5GT	T-9	Triode	6Q-0-0	Cathode	12.6	0.15	3.8	4.2	5.0	Amplifier	Characteristics Same as Type 6J5GT.	.....	.....	.....	.....	.....	.....	.....	12J5GT
12J7GT	T-9	Pentode	7R-1-1	Cathode	12.6	0.15	.007m	5.4	12.0	R-F Amp.	Characteristics Same as Type 6J7G.	.....	.....	.....	.....	.....	.....	.....	12J7GT
12K5	T-5½	Triode	7EK	Cathode	12.6	0.450	.....	.....	.....	Class A1 Amp	.....	.....	.....	.....	.....	.....	.....	.....	12K5
12K7GT	T-9	Pentode	7R-1-8	Cathode	12.6	0.15	.007m	5.0	12.0	R-F Amp.	Characteristics Same as Type 6K7G.	.....	.....	.....	.....	.....	.....	.....	12K7GT
12K8	Metal	Tri. Hexode	8K-1-8	Cathode	12.6	0.15	.03m	6.6	3.5	Mixer Osc. Converter	Characteristics Same as Type 6K8GT.	.....	.....	.....	.....	.....	.....	.....	12K8
12K8GT	T-9	Pentode	7S-0-0	Cathode	12.6	0.600	.....	.....	.....	Power Amp.	Characteristics Same as Type 6K8GT.	.....	.....	.....	.....	.....	.....	.....	12K8GT
12L6GT	T-9	Beam Amp.	8BU-0-0	Cathode	12.6	0.15	0.7*	5.0*	6.0*	Power Amp.	Characteristics Same as Type 25L6GT. (12L6GT Designed for Series String TV Receivers.)	.....	.....	.....	.....	.....	.....	.....	12L6GT
12L8GT	T-9	Duo. Pentode	8BU-0-0	Cathode	12.6	0.15	0.7*	5.0*	6.0*	Power Amp.	.....	.....	.....	.....	.....	.....	.....	.....	12L8GT
12Q7GT	T-9	Duodiode Tri.	7V-1-8	Cathode	12.6	0.15	1.6	2.2	5.0	Det. Amp.	Characteristics Same as Type 6Q7GT.	.....	.....	.....	.....	.....	.....	.....	12Q7GT
12S8GT	T-9	Triple Dio. Tri.	8CB-0-2	Cathode	12.6	0.15	.....	.....	.....	Det. Amp.	Characteristics Same as Type 6S8GT.	.....	.....	.....	.....	.....	.....	.....	12S8GT
12SA7	Metal	Heptode	8R-1-0	Cathode	12.6	0.15	1.3m	9.5	12.0	Converter	Characteristics Same as Type 6SA7.	.....	.....	.....	.....	.....	.....	.....	12SA7
12SA7GT	T-9	Beam Amp.	8AD-1-6	Cathode	12.6	0.15	.5m	11.0	11.0	Power Amp.	Characteristics Same as Type 6SA7.	.....	.....	.....	.....	.....	.....	.....	12SA7GT
12SC7	Metal	Duodiode	8S-1-0	Cathode	12.6	0.15	2.0	2.2	3.0	Amplifier	Characteristics Same as Type 6SC7.	.....	.....	.....	.....	.....	.....	.....	12SC7
12SF5	Metal	Triode	6AB-0-0	Cathode	12.6	0.15	2.4	4.0	3.6	Amplifier	Characteristics Same as Type 6SF5.	.....	.....	.....	.....	.....	.....	.....	12SF5
12SF5GT	T-9	Pentode	7AZ-1-0	Cathode	12.6	0.15	.004m	5.5	6.0	Det. Amp.	Characteristics Same as Type 6SF5.	.....	.....	.....	.....	.....	.....	.....	12SF5GT
12SF7	Metal	Diode Pent.	8BK-1-1	Cathode	12.6	0.15	.003m	8.5	7.0	Det. Amp.	Characteristics Same as Type 6SF7.	.....	.....	.....	.....	.....	.....	.....	12SF7
12SG7	Metal	Pentode	8BK-1-0	Cathode	12.6	0.15	.003m	8.5	7.0	R-F Amp.	Characteristics Same as Type 6SG7.	.....	.....	.....	.....	.....	.....	.....	12SG7
12SH7	Metal	Pentode	8BK-1-1	Cathode	12.6	0.15	.003m	8.5	7.0	R-F Amp.	Characteristics Same as Type 6SH7.	.....	.....	.....	.....	.....	.....	.....	12SH7
12SH7GT	T-9	Pentode	8N-1-1	Cathode	12.6	0.15	.005m	6.0	7.0	R-F Amp.	Characteristics Same as Type 6SH7.	.....	.....	.....	.....	.....	.....	.....	12SH7GT
12SJ7GT	T-9	Pentode	8N-1-5	Cathode	12.6	0.15	.005m	6.3	7.5	R-F Amp.	Characteristics Same as Type 6SJ7.	.....	.....	.....	.....	.....	.....	.....	12SJ7GT
12SK7GT	T-9	Pentode	8N-1-1	Cathode	12.6	0.15	.003m	6.0	7.0	R-F Amp.	Characteristics Same as Type 6SK7.	.....	.....	.....	.....	.....	.....	.....	12SK7GT
12SL7GT	T-9	Duodiode	8BD-0-0	Cathode	12.6	0.15	.005m	6.5	7.5	R-F Amp.	Characteristics Same as Type 6SL7GT.	.....	.....	.....	.....	.....	.....	.....	12SL7GT
12SN7GT	T-9	Duodiode	8BD-0-0	Cathode	12.6	0.30	3.8*	3.0*	1.9*	Amplifier	Characteristics Same as Type 6SN7GT.	.....	.....	.....	.....	.....	.....	.....	12SN7GT
12SN7GTA	T-9	Duodiode	8BD-0-0	Cathode	12.6	0.300	4.0*	2.2*	0.7*	Vertical Osc. Amp.	Characteristics Same as Type 6SN7GTA.	.....	.....	.....	.....	.....	.....	.....	12SN7GTA
12SQ7	Metal	Duodiode Tri.	8Q-1-3	Cathode	12.6	0.15	1.6	3.2	3.0	Det. Amp.	Characteristics Same as Type 6SQ7.	.....	.....	.....	.....	.....	.....	.....	12SQ7
12SQ7GT	T-9	Duodiode Tri.	8Q-1-1	Cathode	12.6	0.15	1.8	4.2	3.4	Det. Amp.	Characteristics Same as Type 6SQ7.	.....	.....	.....	.....	.....	.....	.....	12SQ7GT
12SR7	Metal	Duodiode Tri.	8Q-1-1	Cathode	12.6	0.15	2.3	3.0	3.0	Det. Amp.	Characteristics Same as Type 6SR7.	.....	.....	.....	.....	.....	.....	.....	12SR7
12SW7	Metal	Duodiode Tri.	8Q-1-0	Cathode	12.6	0.15	2.4	3.0	2.8	Det. Amp.	Characteristics Same as Type 6SR7.	.....	.....	.....	.....	.....	.....	.....	12SW7
12SX7GT	T-9	Duodiode	8BD-0-0	Cathode	12.6	0.30	3.6*	3.0*	0.8*	Amplifier	.....	.....	.....	.....	.....	.....	.....	.....	12SX7GT
12SY7	Metal	Heptode	8R-1-0	Cathode	12.6	0.15	.....	.....	.....	Converter	.....	.....	.....	.....	.....	.....	.....	.....	12SY7
12U7	T-6½	Duodiode	7CK	Cathode	12.6	0.150	1.5	1.8	2.0	Class A1 Amp.	.....	.....	.....	.....	.....	.....	.....	.....	12U7
12V6GT	T-9	Beam Amp.	7S	Cathode	12.6	0.925	0.7	9.0	7.5	Power Amp.	.....	.....	.....	.....	.....	.....	.....	.....	12V6GT

(1) Values are given shielded unless marked with (*).
 (2) Converter tube capacitances given are signal grid to plate; RF input, Mixer Output.
 † For two tubes with 40 volts RMS applied to each grid.
 ‡ Controlled Heater Warm-up Time, applies only for 600 Ma. condition.

(3) Has special mechanical and/or life characteristics.
 * With Average Power Input of 350 Mw. Grid to Grid.
 † Per Tube or Section.
 ‡ Plate and Target Supply Voltage.

□ Applied through 20,000 ohms.
 * Pentode Operation.
 † Plate to Plate.
 ‡ Triode Operation.

m maximum
 # Cathode Resistor (ohms).