

# PENNSYLVANIA TUBES — AVERAGE CHARACTERISTICS

Type	Construction		Emitter		Note (1) (2) Capacitances in $\mu\mu$			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 Diags.	Type	Volts	Amps.	Cgp.												
5BR8	T-6½	Tritode Pentode	9FA	Cathode	4.7X	.600	0.008	5.0	3.5	1.0	.....	.....	.....	.....	.....	.....	.....	5BR8	
5BT8	T-6½	Duodi. Pent.	9FE	Cathode	4.7X	.600	0.04m*	7.0*	2.3*	.....	.....	.....	.....	.....	.....	.....	.....	5BT8	
5CG8	T-6½	Tri. Pentode	9GF	Cathode	4.7X	0.600	0.016m	3.0	1.0	1.6	.....	.....	.....	.....	.....	.....	.....	5CG8	
5CL8	T-6½	Tri. Tetrode	9FX	Cathode	4.7X	0.600	0.016m	2.7	1.2	3.0	.....	.....	.....	.....	.....	.....	.....	5CL8	
5CM8	T-6½	Tri. Pentode	9FZ	Cathode	4.7X	0.600	0.09m	1.6	0.22	2.6	.....	.....	.....	.....	.....	.....	.....	5CM8	
5J6	T-5½	Duotriode	7BF-0-0	Cathode	4.7X	0.600	1.5	2.6	1.6	1.0	.....	.....	.....	.....	.....	.....	.....	5J6	
5R4G	ST-16	Duodiode	5T-0-0	Filament	5.0	2.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5R4G	
5R4GY	T-12	Duodiode	5T-0-0	Filament	5.0	2.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5R4GY	
5T4	Metal	Duodiode	5T-0-0	Filament	5.0	2.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5T4	
5T8	T-6½	Triple Dio. Tri.	9E-0-3&7	Cathode	4.7X	0.600	2.2*	1.6*	1.0*	.....	.....	.....	.....	.....	.....	.....	.....	5T8	
5U4G	ST-16	Duodiode	5T-0-0	Filament	5.0	3.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5U4G	
5U4GA	T-11	Duodiode	5T-0-0	Filament	5.0	3.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5U4GA	
5U4GB	T-12	Duodiode	5T-0-0	Filament	5.0	3.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5U4GB	
5U4WG (3)	T-12	Duodiode	5T-0-0	Filament	5.0	3.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5U4WG (3)	
5U8	T-6½	Tri. Pentode	9AE-0-7	Cathode	4.7X	0.600	1.8	2.5	1.0	3.5	.....	.....	.....	.....	.....	.....	.....	5U8	
5V3	T-12	Duodiode	5T-0-0	Filament	5.0	3.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5V3	
5V4G	ST-14	Duodiode	5L-0-0	Cathode	5.0	2.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5V4G	
5V4GA	T-12	Duodiode	5L-0-0	Cathode	5.0	2.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5V4GA	
5V6GT	T-9	Beam Amp.	7S-0-0	Cathode	4.7X	0.600	0.7*	9.0*	7.5*	.....	.....	.....	.....	.....	.....	.....	.....	5V6GT	
5W4	Metal	Duodiode	5T-1-0	Filament	5.0	1.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5W4	
5W4GT	T-9	Duodiode	5T-0-0	Filament	5.0	1.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5W4GT	
5X3	ST-14	Duodiode	4C-0-0	Filament	5.0	2.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5X3	
5X4G	ST-16	Duodiode	5Q-0-0	Filament	5.0	3.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5X4G	
5X4GA	T-12	Duodiode	5Q-0-0	Filament	5.0	3.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5X4GA	
5X8	T-6½	Tri. Pentode	9AK-0-0	Cathode	4.7X	0.600	1.4	2.6	1.0	1.4	.....	.....	.....	.....	.....	.....	.....	5X8	
5Y3GT	T-9	Duodiode	5T-0-0	Filament	5.0	2.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5Y3GT	
5Y3GA	T-12	Duodiode	5Q-0-0	Filament	5.0	2.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5Y3GA	
5Y4G	ST-14	Duodiode	5Q-0-0	Filament	5.0	2.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5Y4G	
5Z3	ST-16	Duodiode	4C-0-0	Filament	5.0	3.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5Z3	
5Z4	Metal	Duodiode	5L-1-0	Cathode	5.0	2.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5Z4	
5Z4GT	T-9	Duodiode	5L-0-0	Filament	5.0	2.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5Z4GT	
6A3	ST-16	Tritode	4D-0-0	Filament	6.3	1.00	16.0	7.0	5.0	.....	.....	.....	.....	.....	.....	.....	.....	6A3	
6A4/LA	ST-14	Pentode	5B-0-0	Filament	6.3	0.30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6A4/LA	
6A5G	ST-16	Tritode	6T-0-0	Cathode	6.3	1.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6A5G	
6A6	ST-14	Duotriode	7B-0-0	Cathode	6.3	0.80	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6A6	
6A7, 6A7S	ST-12	Heptode	7C-0-0	Cathode	6.3	0.30	0.3	8.5	9.0	.....	.....	.....	.....	.....	.....	.....	.....	6A7, 6A7S	
6A8	Metal	Heptode	8A-1-0	Cathode	6.3	0.30	0.6	12.0	12.0	.....	.....	.....	.....	.....	.....	.....	.....	6A8	
6A8G	ST-12	Heptode	8A-0-0	Cathode	6.3	0.30	0.6	9.5	12.0	.....	.....	.....	.....	.....	.....	.....	.....	6A8G	
6A8GT	T-9	Heptode	8A-1-0	Cathode	6.3	0.30	0.6	9.5	12.0	.....	.....	.....	.....	.....	.....	.....	.....	6A8GT	
6AB4	T-5½	Tritode	5CE-0-2	Cathode	6.3	0.15	1.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6AB4	
6AB5/6N5	T-9	Electron Ray	6R-0-0	Cathode	6.3	0.15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6AB5/6N5	
6AB6G	ST-12	Duotriode	7AU-0-0	Cathode	6.3	0.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6AB6G	

(1) Values are given shielded unless marked with (\*).  
 (2) Converter tube capacitances given are signal grid to plate; RF Input, Mixer Output.  
 (3) Has special mechanical and/or life characteristics.  
 †† With Average Power Input of 320 Mw. Grid to cathode.  
 ††† For two tubes with 40 volts RMS applied to each grid.  
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 \* Applied through 250,000 ohms.  
 † Per Tube or Section.  
 †† Conversion Transconductance.  
 ††† Triode Operation.  
 †††† Approximate.  
 † Pentode Operation.  
 †† Plate to Plate.  
 ††† Approximate.  
 †††† Approximate.  
 ††††† Approximate.