

Designed to Meet Military Specifications and Critical Industrial Applications

 Type	Proto- type	Name	Description and/or Difference Between Type and Prototype	Special Tests and Controls													
				Rating or Characteristic	Premium Type	Proto- Type	Shock	Fatigue	Vibration	Glass Strain	AF Noise, Microphones	Stability	Inertness	High Altitude	Heater Cycling	Room Temp.	Elevated Bulb Temp.
						Life Test											
0A2-WA	0A2	Voltage Regulator*	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	—	—	✓	✓	—	—	—	—	—	
0B2-WA	0B2	Voltage Regulator*	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	—	—	✓	✓	—	—	—	—	✓	
2D21-W	2D21	Thyratron Tetrode*	This type is designed to meet the indicated military specification.	✓	✓	✓	—	✓	—	—	—	—	—	—	—	—	
6AC7-W	6AC7	Sharp-Cutoff Pentode■	This type is designed to meet the indicated military specification.	✓	✓	✓	—	✓	—	—	—	—	—	—	—	—	
6AU6-WA	6AU6	Sharp-Cutoff Pentode*	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	—	✓	
6J4-WA	6J4	High-Mu Triode*	This type is designed to meet the indicated military specification.	✓	✓	—	✓	—	✓	✓	✓	✓	✓	✓	—	—	
6J6-WA	6J6	Medium-Mu Twin Triode*	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	—	
12AT7-WA	12AT7	High-Mu Twin Triode§	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	
5636	—	Sharp-Cutoff Pentode*	Heater-Cathode Type. For gated amplifier, delay and mixer circuits up to 400 Mc, and gain-controlled amplifier circuits.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	
5639	—	Sharp-Cutoff Pentode*	Heater-Cathode Type. For use in high-gain wide-band circuits.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	
5651	—	Voltage Regulator*	For use in equipment where extreme voltage stability is required.	—	—	✓	—	✓	—	✓	—	—	✓	—	✓	—	
5651-WA	—	Voltage Regulator*	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	✓	
5654	6AK5	Sharp-Cutoff Pentode*	None	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	
5654/ 6AK5-W	6AK5	Sharp-Cutoff Pentode*	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	
5654/ 6AK5-W/ 6096	6AK5	Sharp-Cutoff Pentode*	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	—	
5670	2C51	Medium-Mu Twin Triode§	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	
5670-WA	2C51	Medium-Mu Twin Triode§	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	
5686	—	Beam Power Tube§	Heater-Cathode Type. For renewal use only.	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	—	—	
5718	—	Medium-Mu Triode*	Heater-Cathode Type. Uhf amplifier and oscillator. Useful power output at 500 Mc., nearly one watt.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	
5719	—	High-Mu Triode*	Heater-Cathode Type. Useful as an audio amplifier in mobile receivers.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	✓	
5725	6AS6	Sharp-Cutoff Pentode*	Bulb Temperature, Max. °C (at hottest point)	165	120	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—	
5726	6AL5	Twin Diode*	Controlled Plate-Current Balance	Yes	No	✓	✓	✓	✓	—	✓	✓	✓	✓	—	✓	
5726/ 6AL5-W	6AL5	Twin Diode*	This type is designed to meet the indicated military specification.	✓	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	—	✓	

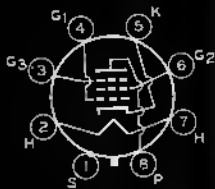
For key to terminal connections see page 30.

* 7-pin miniature type.

§ 9-pin miniature type.

* Subminiature type with flexible leads.

■ Small wafer octal 8-pin type.

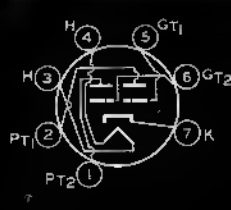
0A2-WA 0B2-WA
5651 5651-WA

6AC7-W

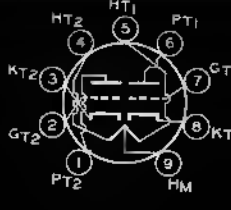


6J4-WA

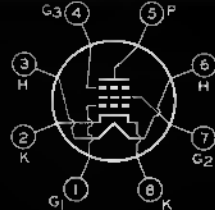
6J6-WA



12AT7-WA



5636



5639

PREMIUM TUBES

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Cathode		Maximum Dimensions Inches		Class of Service	Maximum Ratings				Operating Conditions and Characteristics								 Type
					Plate Volts	Plate Dissipation Watts	Cathode Current Ma.	Grid-No. 2 Input Watts	Plate Supply Volts	Grid-No. 1 Volts(v) or Cathode Resistance Ohms	Grid-No. 2 Supply Volts	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance Micro-mhos	Amplification Factor	Power Output Watts	
Volts	Amps.	Length	Diam.														
Cold Cathode		2 5/8	3/4	Voltage Regulator	For data refer to MIL-E-1/290B specification [▲]												0A2-WA
Cold Cathode		2 5/8	3/4	Voltage Regulator	For data refer to MIL-E-1/291 specification [▲]												0B2-WA
6.3	0.6	2 1/8	3/4	High-Sensitivity Control Service	For data refer to MIL-E-1/756B specification [▲]												2D21-W
6.3	0.45	2 5/8	—	Class A ₁ Amplifier	For data refer to MIL-E-1/354 specification [▲]												6AC7-W
6.3	0.3	2 1/8	3/4	Class A ₁ Amplifier	For data refer to MIL-E-1/1 specification [▲]												6AU6-WA
6.3	0.4	2 1/8	3/4	Class A ₁ Amplifier for UHF Service	For data refer to MIL-E-1/619D specification [▲]												6J4-WA
6.3	0.45	2 1/8	3/4	Class A ₁ Amplifier Each Unit	For data refer to MIL-E-243B specification [▲]												6J6-WA
6.3 12.6	0.3 0.15	2 3/16	7/8	Class A ₁ Amplifier Each Unit	For data refer to MIL-E-1/3A specification [▲]												12AT7-WA
6.3	0.15	1 3/8	0.383	Class A ₁ Amplifier	165	1.1	—	0.7	100 100	150 150	100 100	5.6 4	110000 50000	3200 1950	Grid-No. 3 Volts, 0 Grid-No. 3 Volts, -1	—	5636
6.3	0.45	1 3/4	0.4	Class A ₁ Amplifier	165	4.0	40	1.0	150	100	100	21	50000	9000	—	—	5639
Cold Cathode		2 1/8	3/4	Voltage-Reference Tube	Ambient Temp., -55° to +90°C Approx. DC Starting Volts, 107 Max. Starting Ma., 100 Min. DC Anode-Supply Volts, 115 Approx. DC Operating Volts, 87 Regulation Range, 1.5 to 3.5 Ma. Regulation Volts, 115												5651
Cold Cathode		2 1/8	3/4	Voltage-Reference Tube	For data refer to MIL-E-1/825A specification [▲]												5651-WA
6.3	0.175	1 3/4	3/4	Voltage-Reference Tube	200	1.65	—	0.55	180	180	120	2.4	500000	5100	—	—	5654
6.3	0.175	1 3/4	3/4	Voltage-Reference Tube	For data refer to MIL-E-1/4A specification [▲]												5654/ 6AK5-W
6.3	0.175	1 3/4	3/4	Voltage-Reference Tube	For data refer to MIL-E-1/236 specification [▲]												5654/ 6AK5-W/ 6096
6.3	0.35	1 3/4	7/8	Class A ₁ Amplifier Each Unit	For data refer to MIL-E-1/5C specification [▲]												5670
6.3	0.35	1 3/4	7/8	Class A ₁ Amplifier Each Unit	For data refer to MIL-E-1/247 specification [▲]												5670-WA
6.3	0.35	2 3/16	7/8	Class A ₁ Amplifier	250	7.5	—	3.0	250	-12.5v	250	27	45000	3100	—	2.7	5686
6.3	0.15	1 3/8	0.4	Class C Amplifier and Oscillator	Maximum Ratings, Absolute Values: DC Plate Volts, 165 DC Grid Volts, -55 DC Plate Ma., 22 DC Grid Ma., 5.5 Plate Dissipation, 3.3 Watts												5718
6.3	0.15	1 3/8	0.4	Class A ₁ Amplifier	165	0.55	—	—	150	680	—	1.85	30500	2300	70	—	5719
6.3	0.175	1 3/4	3/4	Class A ₁ Amplifier	200	1.65	20	0.55	120	-2v	120	5.2	—	3200	—	—	5725
6.3	0.3	1 3/4	3/4	Half-Wave Rectifier	Maximum Ratings, Absolute Values: Peak Inverse Plate Volts, 360 DC Output Ma. per Plate, 10 Peak Plate Ma. per Plate, 60 Peak Heater-Cathode Volts, ±360												5726
6.3	0.3	1 3/4	3/4	Half-Wave Rectifier	For data refer to MIL-E-1/7B specification [▲]												5726/ 6AL5-W

[▲] A copy of this specification may be obtained from the Director of the Armed Services Electro-Standards Agency (ASESA) at Fort Monmouth, New Jersey.

[†] Excluding flexible leads.

