

VACUUM-GAUGE TUBES

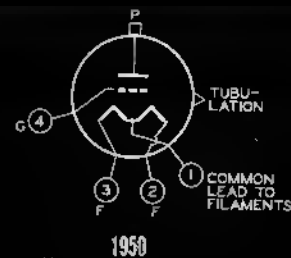
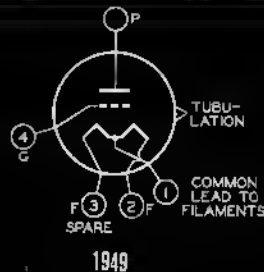
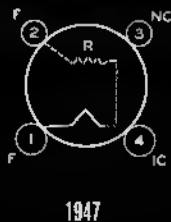
 TYPE	DESCRIPTION
1946	Thermocouple Type. Resistance of thermocouple, 5 ohms approx.
1947	Pirani Type. Each tube individually calibrated to 135.8 ohms res., under vacuum better than 3×10^{-5} mm of Hg. Small 4-pin base.
1949	Ionization Type having two tungsten filaments, one a spare.
1950	Ionization Type similar to 1949 but constructed with soft glass.

For use in determination of gas pressures in vacuum systems and vacuum enclosures.

LOW-MICROPHONIC AMPLIFIER TUBES

Type	Description
1609	Sharp-Cutoff Pentode. Coated-filament type. Small 5-pin base. For new equipment design the 1620 is recommended.
1612	Pentagrid Mixer. Metal type. Similar to 6L7. For volume-expander-compressor circuits. Miniature cap. Octal 7-pin base.
1620	Sharp-Cutoff Pentode. Especially designed for applications critical as to microphonics. Metal type similar to 6J7. Miniature cap. Octal 7-pin base.

For key to terminal connections see page 30.



VACUUM-GAUGE TUBES

Heater or Filament		Maximum Dimensions Including Tubulation Inches			Type of Glass	Maximum Ratings				Operating Position	Range of Gas Pressure				 Type
						Filament Volts	DC Plate Volts	DC Grid Volts	Ambient Temp. °C		Useful Sensitivity		Greatest Sensitivity		
											Microns of Hg	Mm of Hg	Microns of Hg	Mm of Hg	
Volts	Amp.	Length	Diam.	Tubulation Diam.		During Operation									
Htr. 1.0	0.07	6¼♦	1⅛	⅜	Hard, Corning Code 772 Nonex	—	—	—	50	Any	1000 to 0.1	1 to 10 ⁻⁴	1000 to 1	1 to 10 ⁻³	1946
Fil. 10	0.07 to 0.1	7⅞	1⅛	⅞	Soft, Corning Code 001 Lead	16	—	—	60	Any	1500 to less than 10	1.5 to less than 0.01	500 to 10	0.5 to 0.01	1947
Fil. 5	3.5	11½♦	2⅜*	½	Hard, Corning Code 772 Nonex	6.5	-100	+200	100	See Note A	below 0.1	below 10 ⁻⁴	—	—	1949
Fil. 5	3.5	11¼♦	2⅜*	½	Soft, Corning Code 012 Lead	6.5	-100	+200	100	See Note A	below 0.1	below 10 ⁻⁴	—	—	1950

LOW-MICROPHONIC AMPLIFIER TUBES

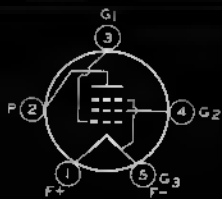
Cathode		Maximum Dimensions Inches		Class of Service	Maximum Ratings				Operating Conditions and Characteristics								Type
					Plate Volts	Plate Dissipation Watts	Cathode Current Ma.	Grid-No. 2 Input Watts	Plate Supply Volts	Grid-No. 1 Volts(v) or Cathode Resistance Ohms	Grid-No. 2 Supply Volts	Plate Current Ma.	AC Plate Resistance Ohms	Trans-conductance Micro-mhos	Amplification Factor	Power Output Watts	
Volts	Amps.	Length	Diam.														
1.1	0.25	4 $\frac{3}{16}$	1 $\frac{9}{16}$	Class A ₁ Amplifier	135	—	—	—	135	-1.5v	67.5	2.5	400000	725	—	—	1609
6.3	0.3	3 $\frac{1}{8}$	1 $\frac{5}{16}$	Class A ₁ Amplifier	250	1.5	—	1.0	250	-3v†	100	5.3	600000	1100	—	—	1612
				Mixer in Superheterodyne	—	—	—	—	250	-3v	100	2.4	Oscillator Grid (#3) Bias, -10 Volts Conversion Transcond., 375 μmhos				
6.3	0.3	3 $\frac{1}{8}$	1 $\frac{5}{16}$	Pentode as Class A ₁ Amplifier	250	0.75	—	0.1	100 250	-3v -3v	100 100	2 2	1.0 meg. 1.0 meg.	1185 1225	— —	— —	1620
				Triode as Class A ₁ Amplifier	250	1.75	—	—	180 250	-5.3v -8v	5* 5*	5.3 6.5	11000 10500	1800 1900	20 20	— —	

† For signal input control grid (#1); control grid (#3) bias, -3 volts.
* Grids No. 2 and No. 3 are connected to plate.

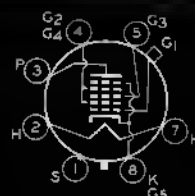
* Maximum radius.

♦ Excluding flexible leads.

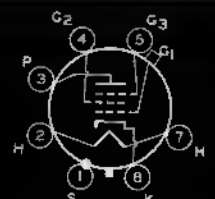
Note A: Vertical, with tubulation up or down; horizontal with stem press in vertical plane.



1609



1612



1620