

CHARACTERISTICS

Plate Voltage	100	250	volts
Grid Voltage	—1	—2	volts
Amplification Factor	100	100	
Plate Resistance	80000	62500	ohms
Transconductance	1250	1600	μ mhos
Plate Current	0.50	1.2	mA

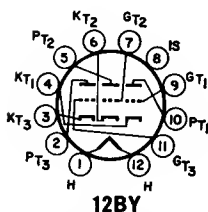
Diode Units**MAXIMUM RATING (Design-Maximum Value)**

Plate Current (Each Unit)	1	mA
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The two diode plates are placed around a cathode, the sleeve of which is common to the triode unit. Each diode plate has its own base pin. Diode biasing of the triode unit is not recommended.

Installation and Application

The triode unit of the 6AV6 is recommended for use only in resistance-coupled circuits. Refer to the Resistance-Coupled Amplifier section for typical operating conditions. Grid bias for the triode unit of the 6AV6 may be obtained from a fixed source, such as a fixed-voltage tap on the dc power supply, or from a cathode-bias resistor. It should not be obtained by the diode-biasing method because of the probability of plate-current cutoff, even with relatively small signal voltages applied to the diode circuit.

**MEDIUM-MU
TRIPLE TRIODE****6AV11**

Duodecar type used for general-purpose amplifier, phase inverter, or oscillator applications. Outlines section, 8A; requires duodecar 12-contact socket.

Heater Voltage (ac/dc)	6.3	volts		
Heater Current	0.6	ampere		
Heater-Cathode Voltage:				
Peak value	±200 max	volts		
Average value	100 max	volts		
Direct Interelectrode Capacitances (Approx.):	Unit No. 1	Unit No. 2	Unit No. 3	
Grid to Plate	1.2	1.2	1.2	pF
Grid to Cathode, Heater, and Internal Shield	1.9	1.9	1.9	pF
Plate to Cathode, Heater, and Internal Shield	1.8	0.7	2	pF

Class A₁ Amplifier (Each Unit)**MAXIMUM RATINGS (Design-Maximum Values)**

Plate Voltage	330	volts
Plate Dissipation	2.75	watts
Total Plate Dissipation (All Plates)	6	watts
Average Cathode Current	20	mA

CHARACTERISTICS

Plate Voltage	100	250	volts
Grid Voltage	0	—8.5	volts
Amplification Factor	20	17	
Plate Resistance (Approx.)	6500	7700	ohms
Transconductance	3100	2200	μ mhos
Plate Current	11.8	10.5	mA
Grid Voltage (Approx.) for plate current of 10 μ A	—	—24	volts

MAXIMUM CIRCUIT VALUES

Grid-No. 1-Circuit Resistance:		
For fixed-bias operation	0.25	megohm
For cathode-bias operation	1	megohm

Refer to chart at end of section.

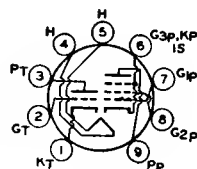
6AW8

6AW8A

8AW8A

**HIGH-MU TRIODE—
SHARP-CUTOFF PENTODE**

Miniature type used in television receiver applications. The pentode unit is used as an if amplifier, video amplifier, agc amplifier, or reactance tube. The triode unit is used in low-frequency oscillator, sync-separator, sync-clipper, and phase-splitter circuits. Outlines section, 6E; requires miniature 9-contact socket. Type 8AW8A is identical with type 6AW8A except for heater ratings.

**9DX**

	6AW8A	8AW8A	
Heater Voltage (ac/dc)	6.3	8.4	volts
Heater Current	0.6	0.45	ampere
Heater Warm-up Time (Average)	11	11	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts

Direct Interelectrode Capacitances:

	Unshielded	Shielded	
Triode Unit:			
Grid to Plate	2.2	2.2	pF
Grid to Cathode, Pentode Cathode, Pentode Grid No.3, Internal Shield, and Heater	3.2	3.4	pF
Plate to Cathode, Pentode Cathode, Pentode Grid No.3, Internal Shield, and Heater	1.8	3	pF
Pentode Unit:			
Grid No.1 to Plate	0.06 max	0.05 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	10	10	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	3.6	4.5	pF
Pentode Grid No.1 to Triode Plate	0.008 max	0.005 max	pF
Pentode Plate to Triode Plate	0.15 max	0.025 max	pF

■ With external shield connected to pins 4 and 5.

Class A₁ Amplifier**MAXIMUM RATINGS (Design-Maximum Values)**

	Triode Unit	Pentode Unit	
Plate Voltage	330	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	330	volts
Grid-No.2 Voltage	See curve	page 98	
Grid-No.1 (Control-Grid) Voltage, positive-bias value	0	0	volts
Plate Dissipation	1.1	3.75	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 165 volts	—	1.1	watts
For grid-No.2 voltages between 165 and 330 volts	See curve	page 98	

CHARACTERISTICS

Plate Supply Voltage	200	150	volts
Grid-No.2 Supply Voltage	—	150	volts
Grid-No.1 Voltage	—2	—	volts
Cathode-Bias Resistor	—	150	ohms
Amplification Factor	70	—	

