ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	12.6/6.3 Volts
Heater Current	225/450 Ma
Maximum Heater-Cathode Voltage	90 Volts

DIRECT INTERELECTRODE CAPACITANCES

	Shielded[1]	Unshielded
Grid to Plate (Each Section)	1.9	1.9 Pf
Input (Each Section)	3.2	3.1 Pf
Output (Section 1)	1.3	0.5 Pf
(Section 2)	1.6	0.4 Pf
Heater to Cathode (Each Section)	4.0	3.8 Pf
Grounded Grid Operation		
Input (Each Section)	7.0	6.9 Pf
Output (Section 1)	2.8	2.0 Pf
(Section 2)	3.2	2.0 Pf
Plate to Cathode (Each Section)	0.23	0.24 Pf

RATINGS (Design Center Rating System) (Each Section)

Plate Voltage (Max.)	300 Volts
Plate Dissipation (Max.)	2.7 Watts
Negative Grid Voltage (Max.)	50 Volts

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier (Each Section)

Plate Voltage	100	150 Volts
Cathode Bias Resistor	120	56 Ohms
Plate Current	9.0	18 Ma
Transconductance	6100	8500 μmhos
Amplification Factor	37	41
Plate Resistance	6100	4800 Ohms
Grid Voltage for Ib = 10 μa	−9	−12 Volts

NOTES:

(1) Shield No. 315 connected to cathode.

(2) Section 1 connects to Pins 6, 7, and 8. Section 2 connects to Pins 1, 2, and 3.

12AX7A/ECC83

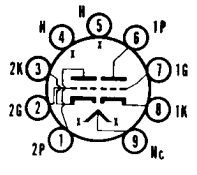
6AX7

Color Television Type

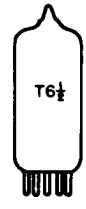
AF AMPLIFIER or PHASE INVERTER

Double High Mu Triode

Construction	Miniature T-6½
Base	Button 9 Pin, E9-1
Basing[1]	9A
Outline	6-2
Maximum Diameter	0.875 In.
Maximum Seated Height	1.937 In.
Maximum Overall Height	2.187 In.



9A



ELECTRICAL DATA

HEATER OPERATION

	6AX7	12AX7/ECC83
Heater Voltage	6.3/3.15	12.6/6.3 Volts
Heater Current	300/600	150/300 Ma
Heater Warm-up Time[3]	11	— Seconds
Maximum Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
Total DC and Peak		200 Volts
Heater Positive with Respect to Cathode		
DC		100 Volts
Total DC and Peak		200 Volts

DIRECT INTERELECTRODE CAPACITANCES

	Section 1[1]		Section 2[1]	
	Shielded	Unshielded	Shielded[2]	Unshielded
Grid to Plate	1.7	1.7	1.7	1.7 Pf
Input (g to h + k)	1.8	1.6	1.8	1.6 Pf
Output (p to h + k)	1.9	0.46	1.9	0.34 Pf

RATINGS (Design Maximum Rating System) (Each Section)

Plate Voltage (Max.)	330 Volts
Plate Dissipation (Max.)	1.0 Watt
Positive DC Grid Voltage (Max.)	0 Volt
Negative DC Grid Voltage (Max.)	−55 Volts