6AU4GTA

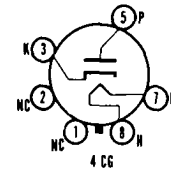
19AU4GTA

Color Television Type

DAMPER

Heater-Cathode Diode

Construction .....Octal T-9
Base[1] ....Octal 5 or 6 Pin, B5-85 or B6-60
Basing[1] 4CG
Outline 9-44
Maximum Diameter .....1.188 In.
Maximum Seated Height .....3.250 In.
Maximum Overall Height .....3.813 In.



ELECTRICAL DATA

HEATER OPERATION

	19AU4GTA	6AU4GTA
Heater Voltage	18.9	6.3 Volts
Heater Current	600	1800 Ma
Heater Warm-up Time	11	— Seconds
Maximum Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
DC		900 Volts
Total DC and Peak		4500 Volts
Heater Positive with Respect to Cathode		
DC		100 Volts
Total DC and Peak		300 Volts
DIRECT INTERELECTRODE CAPACITANCES (Unshielded)		
Heater to Cathode		4.0 Pf
Plate to Cathode and Heater		8.5 Pf
Cathode to Plate and Heater		11.5 Pf
RATINGS (Design Maximum Rating System)		
Damper Diode[2]		
Peak Inverse Plate Voltage (Abs. Max.)		4500 Volts
DC Plate Current (Max.)		190 Ma
Steady State Peak Plate Current (Max.)		1150 Ma
Plate Dissipation (Max.)		6.0 Watts
CHARACTERISTICS AND TYPICAL OPERATION		
Damper Service—90° Deflection Scan System		
Peak Inverse Plate Voltage		3.65 Kv
Peak Heater-Cathode Voltage		3.9 Kv
Average Cathode Current		120 Ma
Peak Cathode Current		500 Ma
Boosted B+ Voltage		640 Volts
Plate Dissipation		2.8 Watts
Average Tube Voltage Drop for Ib = 350 Ma		25 Volts

NOTES:

(1) May be either 5 or 6 pin. Socket terminals No. 1 (if used), 2, 4, and 6 shall not be used as tie points. Pin No. 1 may be omitted on 5 pin base.

(2) For operation in a 525-line, 30-frame system, the duty cycle of the horizontal voltage pulse must not exceed 15% of one horizontal scanning cycle. Power rectification service is not recommended.

6AU6A

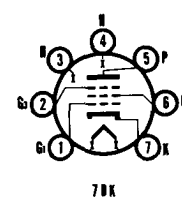
3AU6, 4AU6, 12AU6

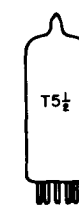
Color Television Type

RF AMPLIFIER

Sharp Cutoff Pentode

Construction .....Miniature T-5½
Base .....Button 7 Pin, E7-1
Basing 7BK
Outline 5-2
Maximum Diameter .....0.750 In.
Maximum Seated Height .....1.875 In.
Maximum Overall Height .....2.125 In.





ELECTRICAL DATA

HEATER OPERATION

	3AU6	4AU6	12AU6	6AU6A
Heater Voltage	3.15	4.2	12.6	6.3 Volts
Heater Current	600	450	150	300 Ma
Heater Warm-up Time	11	11	—	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 (Unshielded)				
Grid to Plate (Max.)				0.0035 Pf
Input				5.5 Pf
Output				5.0 Pf
RATINGS (Design Maximum Rating System)				
Plate Voltage (Max.)				330 Volts
Grid No. 2 Supply Voltage (Max.)				330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)			
Plate Dissipation (Max.)				3.5 Watts
Grid No. 2 Dissipation (Max.)				0.75 Wtats
Positive Grid No. 1 Voltage (Max.)				0 Volt
CHARACTERISTICS AND TYPICAL OPERATION				
Plate Voltage		100	250	250 Volts
Grid No. 3 Voltage	Connected to Cathode at Socket			
Grid No. 2 Voltage		100	125	150 Volts
Cathode Bias Resistor		150	100	68 Ohms
Plate Current		5.0	7.6	10.6 Ma
Grid No. 2 Current		2.1	3.0	4.3 Ma
Transconductance		3900	4500	5200 μmhos
Plate Resistance (Approx.)		0.5	1.5	1.0 Megohm
Grid No. 1 Voltage for Ib = 10 μa		−4.2	−5.5	−6.5 Volts

Color Television Type

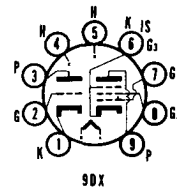
SYNC SEPARATOR (T) VIDEO AMPLIFIER (P)

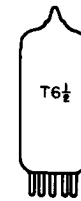
6AU8A

8AU8A

Medium Mu Triode and Sharp Cutoff Pentode

Construction ..... Miniature T-6½
Base ..... Button 9 Pin, E9-1
Basing 9DX
Outline 6-3
Maximum Diameter ..... 0.875 In.
Maximum Seated Height ..... 2.375 In.
Maximum Overall Height ..... 2.625 In.





ELECTRICAL DATA

HEATER OPERATION

	6AU8A	8AU8A
Heater Voltage	6.3	8.4 Volts
Heater Current	600	450 Ma
Heater Warm-up Time	11	11 Seconds
Maximum Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
Total DC and Peak	200	200 Volts
Heater Positive with Respect to Cathode		
DC	100	100 Volts
Total DC and Peak	200	200 Volts
DIRECT INTERELECTRODE CAPACITANCES (Unshielded)		
Triode Section		
Grid to Plate		2.2 Pf
Input		2.6 Pf
Output		0.34 Pf
Pentode Section		
Grid to Plate		0.06 Pf
Input		7.5 Pf
Output		3.4 Pf
Coupling		
Pentode Grid No. 1 to Triode Plate (Max.)		0.006 Pf
Triode Grid to Pentode Plate (Max.)		0.022 Pf
Pentode Plate to Triode Plate (Max.)		0.12 Pf