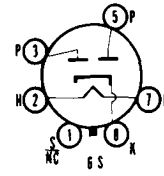
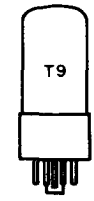
FULL-WAVE POWER RECTIFIER

6AX5GT

Heater-Cathode Twin Diode

Construction .....Octal T-9
Base .....Octal 6 Pin
Basing.....6S
Outline
Maximum Diameter .....1.188 In.
Maximum Seated Height .....2.750 In.
Maximum Overall Height .....3.313 In.





ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	6.3 Volts
Heater Current	1200 Ma
Maximum Heater-Cathode Voltage	450 Volts
RATINGS (Design Maximum Rating System)	
Rectifier Service(1)	
Peak Inverse Plate Voltage (Max.)	1250 Volts
Peak Plate Current (Each Plate) (Max.)	375 Ma
AC Plate Voltage (Each Plate, RMS) (Max.)	450 Volts
Steady State DC Output Current (Max.)	75 Ma

CHARACTERISTICS AND TYPICAL OPERATION

Full-Wave Rectifier—Choke Input to Filter		
AC Plate to Plate Supply Voltage (RMS)	700	900 Volts
Filter Input Choke	10	10 Henrys
DC Output Voltage at Input to Filter		
At Half Load Current of 150 Ma	270	— Volts
At Half Load Current of 125 Ma	—	365 Volts
At Full Load Current of 75 Ma	250	— Volts
At Full Load Current of 62.5 Ma	—	350 Volts
Voltage Regulation (Half Load to Full Load)	20	15 Volts
Full-Wave Rectifier—Capacitor Input to Filter		
AC Plate to Plate Supply Voltage (RMS)	700	900 Volts
Filter Input Capacitor	10	10 μf
Effective Plate Supply Impedance (Each Plate)	50	105 Ohms
DC Output Voltage at Input to Filter		
At Half Load Current of 62.5 Ma	395	— Volts
At Half Load Current of 40 Ma	—	540 Volts
At Full Load Current of 125 Ma	350	— Volts
At Full Load Current of 80 Ma	—	490 Volts
Voltage Regulation (Half Load to Full Load)	45	50 Volts

NOTE:
(1) For use with sinusoidal supply voltages within the frequency range of 25 to 1000 hertz.

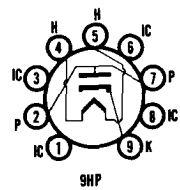
DAMPER

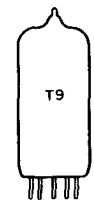
6AY3

12AY3, 17AY3

Heater-Cathode Diode

Construction .....Novar T-9
Base .....Novar Button 9 Pin, E9-75
Basing(1) 9HP
Outline 9-86
Maximum Diameter .....1.188 In.
Maximum Seated Height .....3.030 In.
Maximum Overall Height .....3.410 In.





ELECTRICAL DATA

HEATER OPERATION

	17AY3	12AY3	6AY3
Heater Voltage	16.8	12.6	6.3 Volts
Heater Current	450	600	1200 Ma
Heater Warm-up Time	11	11	— Seconds

Maximum Heater-Cathode Voltage

Heater Negative with Respect to Cathode

DC	900 Volts
Total DC and Peak	5000 Volts
Heater Positive with Respect to Cathode	
DC	100 Volts
Total DC and Peak	300 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Heater to Cathode	2.8 Pf
Plate to Cathode and Heater	6.5 Pf
Cathode to Plate and Heater	9.0 Pf

RATINGS (Design Maximum Rating System)

Damper Service(2)

Peak Inverse Plate Voltage (Max.)	5000 Volts
Plate Dissipation (Max.)	6.3 Watts
Steady State Peak Current (Max.)	1100 Ma
DC Plate Current (Max.)	175 Ma

NOTES:

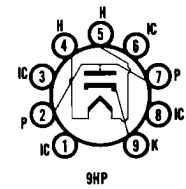
(1) Pins 1, 3, 6, and 8 should not be used as tie points.
(2) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.

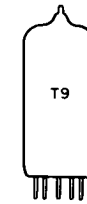
6AY3A

DAMPER

Heater-Cathode Diode

Construction .....Novar T-9
Base .....Novar Button 9 Pin, E9-75
Basing 9HP
Outline 9-85
Maximum Diameter .....1.188 In.
Maximum Seated Height .....2.730 In.
Maximum Overall Height .....3.110 In.
6AY3A is identical to 6AY3 except for shorter bulb.

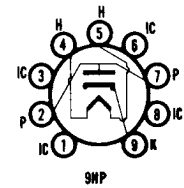
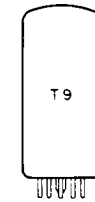




6AY3B

12AY3A, 17AY3A

DAMPER

Heater-Cathode Diode

Construction .....Novar T-9
Base .....Novar Button 9 Pin, E9-89
(Exhaust Tip on Base)
Basing 9HP
Outline
Maximum Diameter .....1.188 In.
Maximum Seated Height .....2.625 In.
Maximum Overall Height .....3.005 In.
6AY3B, 12AY3A, 17AY3A are identical to 6AY3, 6AY3A, 12AY3, 17AY3 except for base with exhaust tip at bottom and shorter bulb.