

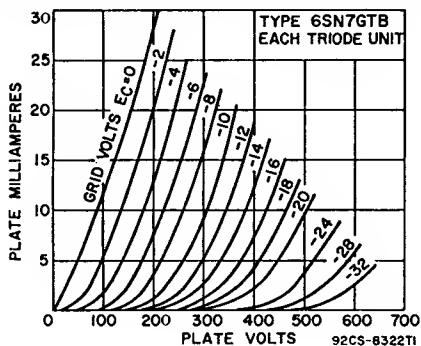
Average Cathode Current	20	mA
Plate Dissipation:		
For either plate	5	watts
For both plates with both units operating	7.5	watts

MAXIMUM CIRCUIT VALUE

Grid-Circuit Resistance, for cathode-bias operation	2.2	megohms
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Pulse duration must not exceed 15% of a vertical cycle (2.5 milliseconds).

■ Under no circumstances should this absolute value be exceeded.



Refer to chart at end of section.

6SQ7
6SQ7GT

Refer to chart at end of section.

6SR7

Refer to chart at end of section.

6SS7

Refer to chart at end of section.

6ST7

Refer to chart at end of section.

6SZ7

Refer to chart at end of section.

6T4

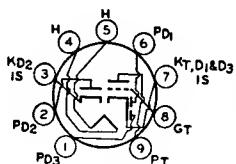
For replacement use type 6AF4A.

Refer to chart at end of section.

6T7G

Refer to chart at end of section.

6T8



9E

TRIPLE DIODE— HIGH-MU TRIODE

6T8A

5T8, 19T8

Miniature type used as combined audio amplifier, AM detector, and FM detector in AM/FM radio receivers. Diode unit No.1 is used for AM detection, and diode units No.2 and No.3 are used for FM detection. Outlines section, 6B; requires miniature 9-contact socket.

For typical operation as resistance-coupled amplifier,

refer to Resistance-Coupled Amplifier section. Types 5T8 and 19T8 are identical with type 6T8A except for heater ratings.

	5T8	6T8A	19T8	
Heater Voltage (ac/dc)	4.7	6.3	18.9	volts
Heater Current	0.6	0.45	0.15	ampere
Heater Warm-up Time (Average)	11	11	11	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±100 max	±90 max	volts
Average value	100 max	—	—	volts

Direct Interelectrode Capacitances:

	Unshielded	Shielded	
Triode Unit:			
Grid to Plate	1.7	1.7	pF
Grid to Cathode, Internal Shield (pin 7), and Heater	1.6	1.7	pF
Plate to Cathode, Internal Shield (pin 7), and Heater	1.2	2.4	pF
Diode Units:			
Diode-No.1 Plate to Cathode, Internal Shield (pin 7), and Heater	3.8	3.8	pF
Diode-No.2 Plate to Cathode, Internal Shield (pin 3), and Heater	3.8	3.8*	pF
Diode-No.3 Plate to Cathode, Internal Shield (pin 7), and Heater	3.4	3.6	pF
Diode-No.2 Cathode, Internal Shield (pin 3) to All Other Electrodes, and Heater	7.5	8.5*	pF
Triode Grid to any Diode Plate	0.034 max	0.034 max	pF

* With external shield connected to pin 7 except as noted.

• With external shield connected to pin 3.

▪ With external shield connected to pins 4 and 5.

Triode Unit as Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	330	volts
Grid Voltage, Positive-bias value	0	volts
Plate Dissipation	1.1	watts

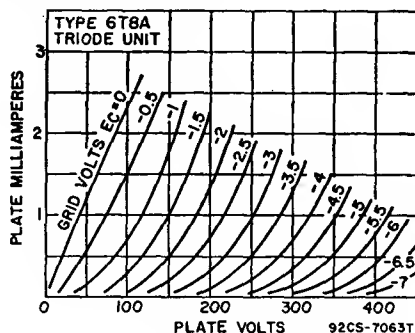
CHARACTERISTICS

Plate Voltage	100	250	volts
Grid Voltage	-1	-3	volts
Amplification Factor	70	70	
Plate Resistance (Approx.)	54000	58000	ohms
Transconductance	1300	1200	μmhos
Plate Current	0.8	1	mA

Diode Units

MAXIMUM RATING (Design-Maximum Values)

Plate Current (Each Unit)	5.5	mA
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6T9

Refer to chart at end of section.

6T10

10T10, 12T10

BEAM POWER TUBE—
SHARP-CUTOFF PENTODE

Duodecar type used as combined FM detector and audio-frequency output amplifier in color and black-and-white television receivers. The beam power unit is used in af output stages, and the sharp-cutoff, dual-control pentode unit is used as an FM detector. Outlines section, 8C; requires duodecar 12-contact socket. For maximum ratings and characteristics, refer to type 6AL11. Types 10T10 and 12T10 are identical with type 6T10 except for heater ratings.

