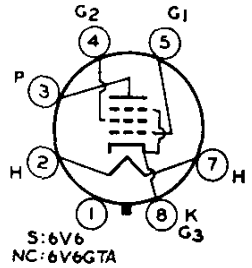

7AC

6V6
6V6GTA
12V6GT

BEAM POWER TUBE

Metal type 6V6 and glass octal type 6V6GTA are used as output amplifiers in automobile, battery-operated, and other receivers in which reduced plate-current drain is desirable. **Outlines section,** 2B and 13D, respectively; require octal socket. These tubes are equivalent in performance to type 6AQ5A. Refer to type 6AQ5A for average plate characteristic curves. Type 12V6GT is identical with type 6V6GTA except for heater ratings.

	6V6	6V6GTA	12V6GT	
Heater Voltage (ac/dc)	6.3	6.3	12.6	volts
Heater Current	0.45	0.45	0.225	ampere
Heater Warm-up Time (Average)	—	11	—	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts
		6V6°	6V6GTA	
Direct Interelectrode Capacitances (Approx.):				
Grid No.1 to Plate		0.3	0.7	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3		10	9	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3		11	7.5	pF

° With shell connected to cathode.

Class A_1 Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	350	volts
Grid-No.2 (Screen-Grid) Voltage	315	volts
Plate Dissipation	14	watts
Grid-No.2 Input	2.2	watts

TYPICAL OPERATION

Plate Voltage	180	250	315	volts
Grid-No.2 Voltage	180	250	225	volts
Grid-No.1 (Control-Grid) Voltage	—8.5	—12.5	—13	volts
Peak AF Grid-No.1 Voltage	8.5	12.5	13	volts
Zero-Signal Plate Current	29	45	34	mA
Maximum-Signal Plate Current	30	47	35	mA
Zero-Signal Grid-No.2 Current	3	4.5	2.2	mA
Maximum-Signal Grid-No.2 Current	4	7	6	mA
Plate Resistance (Approx.)	50000	50000	80000	ohms
Transconductance	3700	4100	3750	μmhos
Load Resistance	5500	5000	8500	ohms
Total Harmonic Distortion	8	8	12	per cent
Maximum-Signal Power Output	2	4.5	5.5	watts

CHARACTERISTICS (Triode Connection)▲

Plate Voltage	250	volts
Grid-No.1 (Control-Grid) Voltage	—12.5	volts
Amplification Factor	9.8	
Plate Resistance (Approx.)	1960	ohms
Transconductance	5000	μmhos
Plate Current	49.5	mA
Grid-No.1 Voltage (Approx.) for plate current of 0.5 mA	—36	volts

▲ Grid No.2 connected to plate.

Push-Pull Class A_1 Amplifier

MAXIMUM RATINGS (Same as for Class A_1 Amplifier)

TYPICAL OPERATION (Values are for two tubes)

Plate Voltage	250	285	volts
Grid-No.2 Voltage	250	285	volts
Grid-No.1 (Control-Grid) Voltage	—15	—19	volts
Peak AF Grid-No.1-to-Grid-No.1 Voltage	30	38	volts
Zero-Signal Plate Current	70	70	mA
Maximum-Signal Plate Current	79	92	mA
Zero-Signal Grid-No.2 Current	5	4	mA
Maximum-Signal Grid-No.2 Current	13	13.5	mA