

BEAM POWER AMPLIFIER TYPES 12L6-GT, 25L6-GT AND 50L6-GT

The 12L6-GT, 25L6-GT and 50L6-GT are beam pentode types used in the output stage of ac-dc receivers. These types feature high power sensitivity and plate efficiency at low plate and screen voltages.

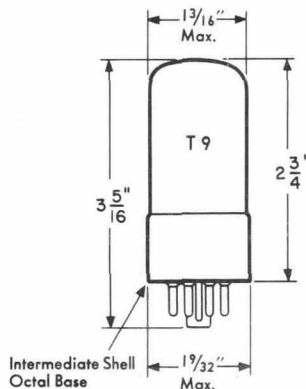
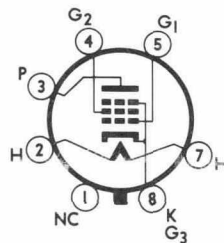
The 12L6-GT has been designed for use in receivers which employ series-connected heaters, especially in television receivers where the picture-tube heater is in series with other heaters. When it is employed in this type of circuit with other tubes having a heater current rating of 600 ma., heater voltage surges across individual tubes are minimized inasmuch as the heater warm-up characteristic is controlled.

ELECTRICAL:

Cathode:	Coated Unipotential		
Heater:	12L6-GT	25L6-GT	50L6-GT
Voltage (ac or dc)	12.6	25.0	50.0 Volts
Current	0.6	0.30	0.15 Ampere
Warm-up Time, approx. ▲	11	--	-- Seconds
Direct Interelectrode Capacitances:			
Grid to Plate.	0.8 uuf		
Input.	15 uuf		
Output.	9.0 uuf		

MECHANICAL:

Bulb	T-9
Base	Intermediate Shell Octal 7-Pin (JETEC B7-7)
Basing	7AC
Mounting Position	Any



MAXIMUM RATINGS:

Design Center Values

Plate Voltage	200 max.	Volts
Plate Dissipation	10 max.	Watts
Screen Voltage	125 max.	Volts
Screen Dissipation	1.25 max.	Watts

Heater-Cathode Voltage:

Heater Negative with Respect

to Cathode: 12L6GT-25L6GT-50L6GT

Total DC + Peak.	300	200	90 max.	Volts
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Heater Positive with Respect

to Cathode:

DC Component	100	100	-- max.	Volts
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Total DC + Peak	200	200	90 max.	Volts
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Grid Circuit Resistance:

Gathode Bias	0.5 max.	Megohm
Fixed Bias	0.1 max.	Megohm

CHARACTERISTICS AND TYPICAL OPERATION:

Class A₁ Amplifier

Plate Voltage	110	200	Volts
Screen Voltage	110	110	Volts
Control Grid Voltage	-7.5	-8	Volts
Peak A-F Control Grid Voltage	7.5	8	Volts
Zero Signal Plate Current	49	50	Ma.
Zero Signal Screen Current	4	2	Ma.
Max. Signal Plate Current	50	55	Ma.
Max. Signal Screen Current	11	7	Ma.
Transconductance	9000	9500	umhos
Plate Resistance, approx.	13000	30000	Ohms
Load Resistance	2000	3000	Ohms
Power Output	2.1	4.3	Watts
Total Harmonic Distortion	10	10	Percent

▲ Heater Warm-up Time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying 4 times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to 3 times rated heater voltage divided by rated heater current.

Supersedes 12L6-GT Sheet Dated October 15, 1954

Supersedes 25L6-GT Sheet Dated January 28, 1955

Supersedes 50L6-GT Sheet Dated January 28, 1955

Receiving Tube Section

