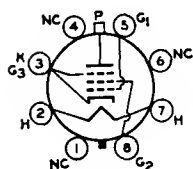


Refer to type 6BQ6GTB/6CU6.

25CU6



5BT

BEAM POWER TUBE

25DN6

Glass octal type used as horizontal-deflection amplifier in television receivers. Outlines section, 21; requires octal socket. Vertical tube mounting is preferred but horizontal operation is permissible if pins 1 and 3 are in vertical plane.

Heater Voltage (ac/dc)	25	volts
Heater Current	0.6	ampere
Heater Warm-up Time (Average)	11	seconds
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts

Class A₁ Amplifier

CHARACTERISTICS

Plate Voltage	50	125	volts
Grid-No.2 (Screen-Grid) Voltage	100	125	volts
Grid-No.1 (Control-Grid) Voltage	0	-18	volts
Mu Factor, Grid-No.2 to Grid No.1	—	4.35	
Plate Resistance	—	4000	ohms
Transconductance	—	9000	μmhos
Plate Current	240*	70	mA
Grid-No.2 Current	30*	6.3	mA
Grid-No.1 Voltage (Approx.) for plate current of 0.5 mA	—	-36	volts

* These values can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

Horizontal-Deflection Amplifier

For operation in a 525-line, 30-frame system

MAXIMUM RATINGS (Design-Center Values)

DC Plate Voltage	700	volts
Peak Positive-Pulse Plate Voltage# (Absolute Maximum)	6600□	volts
Peak Negative-Pulse Plate Voltage	1500	volts
DC Grid-No.2 (Screen-Grid) Voltage	175	volts
Peak Negative-Pulse Grid-No.1 (Control-Grid) Voltage	200	volts
Peak Cathode Current	700	mA
Average Cathode Current	200	mA
Plate Dissipation†	15	watts
Grid-No.2 Input	3	watts
Bulb Temperature (At hottest point)	225	°C

MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance	0.47	megohm
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Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

□ Under no circumstances should this absolute value be exceeded.

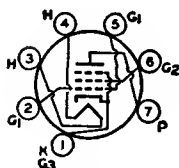
† A bias resistor or other means is required to protect the tube in absence of excitation.

Refer to chart at end of section.

25EC6

Refer to type 6EH5.

25EH5



7CV

BEAM POWER TUBE

25F5A

Miniature type used in audio-output stage of ac/dc radio receivers employing series-connected heater strings. Outlines section, 5D; requires miniature 7-contact socket.

Heater Voltage (ac/dc)	25	volts
Heater Current	0.15	ampere

Heater Warm-up Time (Average)	17	seconds
Heater-Cathode Voltage:		
Peak value	± 200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances (Approx.):		
Grid No.1 to Plate	0.44	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No. 3	12	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3	8	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	150	volts
Grid-No.2 (Screen-Grid) Voltage	130	volts
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	volts
Plate Dissipation	5.5	watts
Grid-No.2 Input	1.1	watts
Bulb Temperature (At hottest point)	220	°C

TYPICAL OPERATION AND CHARACTERISTICS

Plate Voltage	110	volts
Grid-No.2 Voltage	110	volts
Grid-No.1 Voltage	-7.5	volts
Peak AF Grid-No.1 Voltage	-7.5	volts
Plate Resistance (Approx.)	13000	ohms
Transconductance	6400	μ mhos
Zero-Signal Plate Current	43	mA
Maximum-Signal Plate Current	45	mA
Zero-Signal Grid-No.2 Current	3.8	mA
Maximum-Signal Grid-No.2 Current	7.3	mA
Effective Load Resistance	2500	ohms
Total Harmonic Distortion	7	per cent
Maximum-Signal Power Output	1.5	watts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.1	megohm
For cathode-bias operation	0.5	megohm

Push-Pull Class AB₁ Amplifier

MAXIMUM RATINGS (Same as for class AB₁ amplifier)

TYPICAL OPERATION (Values are for two tubes)

Plate Voltage	110	volts
Grid-No.2 Voltage	110	volts
Grid-No.1 Voltage	-8	volts
Peak AF Grid-No.1-to-Grid-No.1 Voltage	14.4	volts
Zero-Signal Plate Current	82	mA
Maximum-Signal Plate Current	88	mA
Zero-Signal Grid-No.2 Current	7.2	mA
Maximum-Signal Grid-No.2 Current	12.5	mA
Effective Load Resistance (Plate-to-plate)	4500	ohms
Total Harmonic Distortion	2.6	per cent
Maximum-Signal Power Output	2.9	watts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.1	megohm
For cathode-bias operation	0.5	megohm

25JQ6

Refer to type 6JQ6.

25L6

Refer to chart at end of section.

25L6GT

Refer to chart at end of section.

25N6G

Refer to chart at end of section.

25W4GT

Refer to chart at end of section.

25W6GT

Refer to type 6W6GT.

25Y5

Refer to chart at end of section.

25Z5

Refer to chart at end of section.

25Z6

Refer to chart at end of section.

25Z6GT

26

Refer to chart at end of section.