

Diode Unit

MAXIMUM RATINGS (Design-Center Values)

Peak Inverse Plate Voltage	430	volts
Peak Plate Current	180	mA
Average Plate Current	45	mA

6BY11

Refer to chart at end of section.

6BZ3

For replacement use type 6BE3/6BZ3.

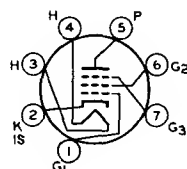
6BZ6

6BZ6/6JH6

3BZ6, 4BZ6, 12BZ6

SEMIREMOTE-CUTOFF
PENTODE

Miniature type used in gain-controlled video if stages of color and black-and-white television receivers. Outlines section, 5C; requires miniature 7-contact socket. Types 3BZ6, 4BZ6, and 12BZ6 are identical with type 6BZ6 except for heater ratings.



7CM

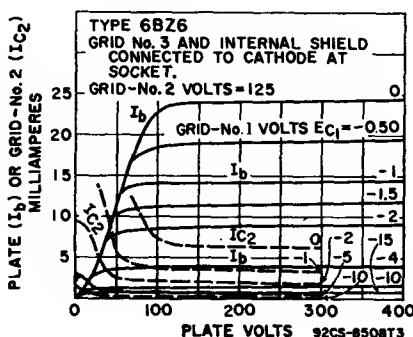
	3BZ6	4BZ6	6BZ6 6BZ6/6JH6	12BZ6	
Heater Voltage (ac/dc)	3.15	4.2	6.3	12.6	volts
Heater Current	0.6	0.45	0.3	0.15	ampere
Heater Warm-up Time (Average)	11	11	—	—	seconds
Heater-Cathode Voltage:					
Peak value	±200 max	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances:			Unshielded	Shielded	
Grid No.1 to Plate			0.025 max	0.015 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			7	7	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			2	3	pF

Δ With external shield connected to cathode.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	330	volts
Grid No.3 (Suppressor-Grid) Voltage, Positive value	0	volts
Grid-No.2 (Screen-Grid) Supply Voltage	330	volts
Grid-No.2 Voltage	See curve page 300	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	volts
Plate Dissipation	2.3	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 165 volts	0.55	watt
For grid-No.2 voltages between 165 and 330 volts	See curve page 300	



CHARACTERISTICS

Plate Supply Voltage	125	volts
Grid-No.3	Connected to cathode at socket	
Grid-No.2 Supply Voltage	125	volts
Cathode-Bias Resistor	56	ohms
Plate Resistance (Approx.)	0.26	megohm
Transconductance	8000	μ mhos
Plate Current	14	mA
Grid-No.2 Current	3.6	mA
Grid-No.1 Voltage (Approx.) for transconductance of 50 μ mhos	-19	volts
Grid-No.1 Voltage (Approx.) for transconductance of 700 μ mhos	-4.5	volts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.25	megohm
For cathode-bias operation	1	megohm

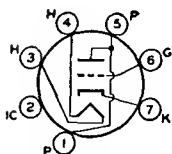
Refer to chart at end of section.
For replacement use type 6BQ7A/6BZ7/6BS8.

6BZ7

Refer to chart at end of section.
For replacement use type 6BC8/6BZ8.

6BZ8**6C4**

POWER TRIODE

**6BG6**

Miniature type used as a cascode amplifier in vhf color local oscillator in FM and other high-frequency circuits and as a class C rf amplifier. Outlines section, 5C; requires miniature 7-contact socket. For typical operation as a resistance-coupled amplifier, refer to Resistance-Coupled Amplifier section. For additional curve of plate characteristics, refer to type 12AU7A.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.15	ampere
Heater-Cathode Voltage:		
Peak value	± 200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances (Approx.)	Unshielded	Shielded ^a
Grid to Plate	1.6	1.4
Grid to Cathode and Heater	1.8	1.8
Plate to Cathode and Heater	1.3	2.5

^a With external shield connected to cathode.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Center Values)

Plate Voltage	300 max	volts
Plate Dissipation	3.5 max	watts

CHARACTERISTICS

Plate Voltage	100	250	volts
Grid Voltage*	0	-8.5	volts
Amplification Factor	19.5	17	
Plate Resistance (Approx.)	6250	7700	ohms
Transconductance	3100	2200	μ mhos
Plate Current	11.8	10.5	mA
Grid Voltage (Approx.) for plate current of 10 μ A	-10	-25	volts

MAXIMUM CIRCUIT VALUES

Grid-Circuit Resistance:		
For fixed bias operation	0.25	megohm
For cathode-bias operation	1	megohm

* Transformer- or impedance-type input coupling devices are recommended to minimize resistance in the grid circuit.

RF Power Amplifier and Oscillator—Class C Telephony

MAXIMUM RATINGS (Design-Center Values)

Plate Voltage	300	volts
Grid Voltage	-50	volts
Plate Current	25	mA
Grid Current	8	mA
Plate Dissipation	5	watts