

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:

For fixed-bias operation	0.25	megohm
For cathode-bias operation	2.2	megohms

† In horizontal-deflection service, 15 volts may be applied to grid-No.3 to minimize snivets.

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

* Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

6KL8

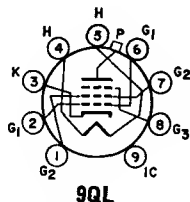
Refer to chart at end of section.

6KM6

22KM6

BEAM POWER TUBE

Novar type used as horizontal-deflection amplifier in color and black-and-white television receivers. Outlines section, 18A; requires novar 9-contact socket. Type 22KM6 is identical with type 6KM6 except for heater ratings.



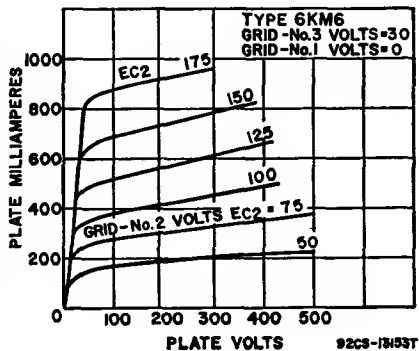
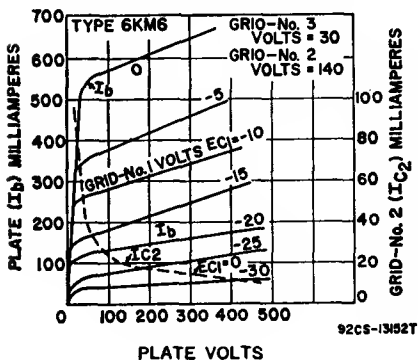
9QL

Heater Voltage (ac/dc)	6KM6 6.3	22KM6 22	volts
Heater Current	1.6	0.45	amperes
Heater Warm-up Time	—	11	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances:			
Grid No.1 to Plate	—	1.2	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	—	22	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3	—	9	pF

Class A₁ Amplifier

CHARACTERISTICS

	Triode Connection	Pentode Connection	
Plate Voltage	140	60 140	volts
Peak Positive-Pulse Plate Voltage**	—	6500	volts
Grid-No.3 (Suppressed-Grid) Voltage	0	30 30	volts
Grid-No.2 (Screen-Grid) Voltage	140	140 140	volts
Grid-No.1 (Control-Grid) Voltage	-24.5	0 -24.5	volts
Amplification Factor†	4	—	
Plate Resistance (Approx.)	—	6000	ohms
Transconductance	—	9500	μmhos
Plate Current	—	560†† 80	mA
Grid-No.2 Current	—	31†† 2.4	mA
Grid-No.1 Voltage for plate current of 1 mA	—	-110 -42	volts



Horizontal-Deflection Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

DC Plate Supply Voltage	770	volts
Peak Positive-Pulse Plate Voltage#	6500	volts
Peak Negative-Pulse Plate Voltage	1500	volts
DC Grid-No.3 Voltage*	75	volts
DC Grid-No.2 Voltage	220	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
Peak Cathode Current	950	mA
Average Cathode Current	275	mA
Crid-No.2 Input	3.5	watts
Plate Dissipation**	20	watts
Bulb Temperature (At hottest point)	240	°C

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:		
For grid-resistor-bias operation	0.47	megohm
For plate-pulsed operation	10	megohms

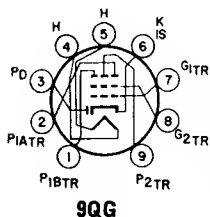
Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

† With grid No.3 and grid No.2 connected, respectively, to cathode and plate at socket.

†† This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

▪ In this service, a positive value may be applied to grid No.3 to minimize "snivets" interference; a typical value for this voltage is 30 volts.

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

DIODE—SHARP-CUTOFF
THREE-PLATE TETRODE

6KM8

Miniature type used in frequency-divider and complex-wave generator circuits of electronic musical instruments. In such circuits the tetrode unit can provide three independent output-signal voltages; the diode unit can be used as a key in a vibrato circuit. Outlines section, 6E; requires miniature 9-contact socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.3	ampere
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances:		
Tetrode Unit:		
Crid No.1 to Plate No.1A	0.02 max	pF
Crid No.1 to Plate No.1B	0.02 max	pF
Crid No.1 to Plate No.2	0.06 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Internal Shield	5.5	pF
Plate No.1A to Cathode, Heater, Grid No.2, and Internal Shield	1.2	pF
Plate No.1B to Cathode, Heater, Grid No.2, and Internal Shield	1.3	pF
Plate No.2 to Cathode, Heater, Grid No.2, and Internal Shield	1.8	pF
Tetrode Crid No.1 to Diode Plate	0.024 max	pF
Tetrode Plate No.1A to Diode Plate	0.18	pF
Tetrode Plate No.1B to Diode Plate	0.024	pF
Tetrode Plate No.2 to Diode Plate	0.013	pF

Tetrode Unit as Class A₁ Amplifier

Plates No. 1A, 1B, and 2 connected together

CHARACTERISTICS

Plate Voltage	100	volts
Crid-No.2 Voltage	100	volts
Grid-No.1 Supply Voltage	0	volts
Grid-No.1 Resistor (Bypassed)	2.2	megohms
Plate Resistance (Approx.)	30000	ohms
Transconductance	3400	μmhos
Plate Current	4.2	mA
Grid-No.2 Current	1.7	mA
Crid-No.1 Voltage (Approx.) for plate current of 20 μA	—4	volts