

9QL

BEAM POWER TUBE

6MJ6/ 6LQ6/6JE6C

24LQ6/24JE6C, 31LQ6

Novar types used as horizontal-deflection amplifier in color and black-and-white television receivers. **Outlines section, 32C**; requires novar 9-contact socket. Types 24LQ6/24JE6C, and 31LQ6 are identical with type 6MJ6/6LQ6/6JE6C except for heater ratings.

	6MJ6/ 6LQ6/6JE6C	24LQ6/24JE6C	31LQ6	
Heater Voltage (ac/dc)	6.3	24	31	volts
Heater Current	2.3	0.6	0.45	amperes
Heater Warm-up Time	—	11	11	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances:				
Grid No.1 to Plate			0.6	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			11	pF

Class A₁ Amplifier

CHARACTERISTICS

	Triode* Connection		Pentode Connection		
	—	5000	—	—	
Peak Positive-Pulse Plate Voltage#	—	5000	—	—	volts
Plate Voltage	145	—	60	175	volts
Grid-No.3 (Suppressor-Grid) Voltage	—	30	30	30	volts
Grid-No.2 (Screen-Grid) Voltage ..	145	145	145	145	volts
Grid-No.1 (Control-Grid) Voltage ..	—35	—	0	—35	volts
Plate Resistance (Approx.)	—	—	—	7000	ohms
Transconductance	—	—	—	7500	μmhos
Plate Current	—	—	710‡	95	mA

Grid-No.2 Current	—	—	55‡	2.4	mA
Grid-No.1 Voltage for plate current of 1 mA	—	—125	—	—60	volts
Amplification Factor	2.8	—	—	—	

* Grid No.3 and grid No.2 connected, respectively, to cathode and plate at socket.
‡ This value may 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

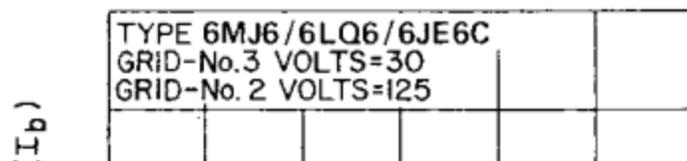
MAXIMUM RATINGS (Design-Maximum Values)

Plate Supply Voltage	990	volts
Peak Positive-Pulse Plate Voltage#	7500	volts
Peak Negative-Pulse Plate Voltage	1100	volts
Grid-No.3 Voltage■	75	volts
Grid-No.2 Voltage	220	volts
Peak Negative-Pulse Grid-No.1 Voltage	330	volts
Peak Cathode Current	1200	mA
Average Cathode Current	350	mA
Plate Dissipation ^o	30	watts
Plate Dissipation (Temporary overload)▲	200	watts
Grid-No.2 Input	5	watts
Envelope Temperature (At hottest point)	250	°C

MAXIMUM CIRCUIT VALUES

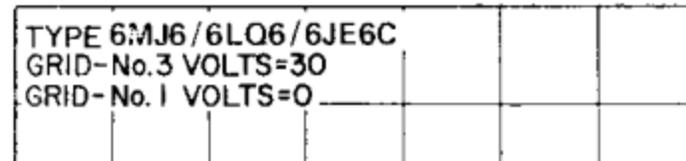
Grid-No.1-Circuit Resistance:		
For grid-No.1-resistor-bias operation	0.47	megohm
For plate-pulsed operation (horizontal-deflection circuits only)	10	megohms

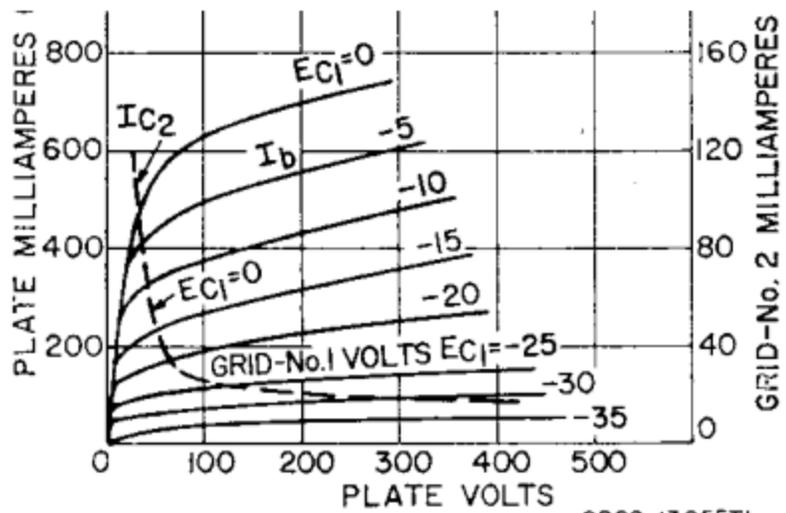
- # Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).
■ For horizontal-deflection service, a positive voltage may be applied to grid-No.3 to minimize "snivets" interference in both vhf and uhf television receivers. A typical value is 30 volts.
^o A bias resistor or other means is required to protect the tube in absence of excitation.
▲ Total continuous or accumulated time not to exceed 40 seconds.



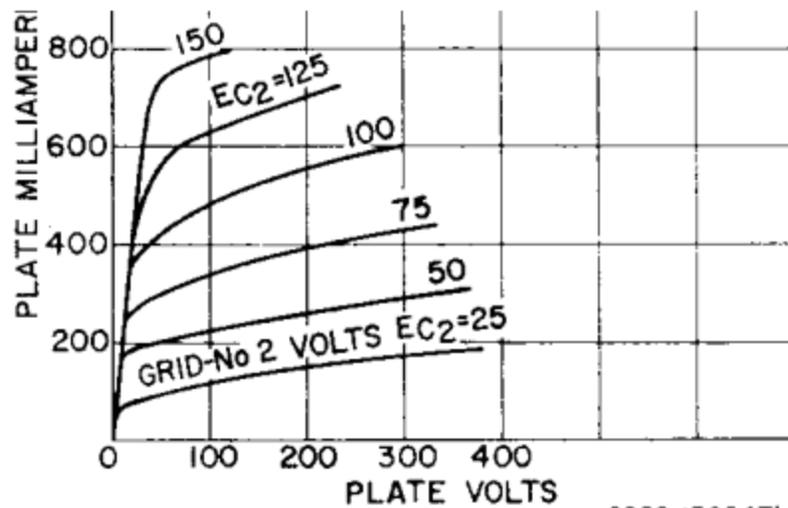
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