SEL STANDARD ELEKTRIK LORENZ 6HU8/12HU8

Data for EIA Registration

January 2, 1961

RECEIVING TUBE

JEDEC TYPE 6HU8/12HU8

(SEL-Type ELL80/PLL80)

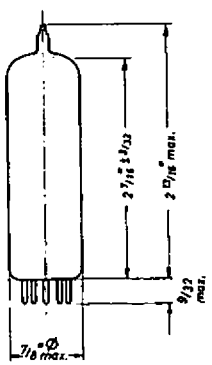
DESCRIPTION:

Twin output pentode for use as audio-frequency output tube in stereophonic radio receivers and recorders, push-pull output tube and as line frequency oscillator and reactance tube in television receivers.

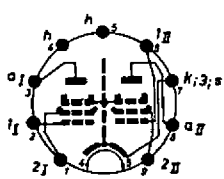
MECHANICAL DATA:

Cathode	Coated unipotential
Outline drawing	JEDEC 6-8
Base	E9 - 1
Bulb	T6 1/2
Mounting position	Any

TUBE OUTLINE



BOTTOM VIEW OF BASE



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BASE PIN No.	ELEMENT
1	Grid No. 2 of pentode No. 1
2	Grid No. 1 of pentode No. 1
3	Plate of pentode No. 1
4	Heater
5	Heater
6	Grid No. 1 of pentode No. 2
7	Cathode, grid No. 3, internal shield
8	Plate of pentode No. 2
9	Grid No. 2 of pentode No. 2

ELECTRICAL DATA:

Heater Characteristics	6HU8	12HU8	
Heater voltage	6,3	12	volts
Heater current	0, 55	0,300	amp.

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Maximum heater-cathode voltage		
Heater negative with respect to cathode DC	100	volts
total DC and peak	200	volts
Heater positive with respect to cathode DC	100	volts
total DC and peak	200	volts

Direct Interelectrode Capacitances	Pentode No. 1	Pentode No. 2	
Grid No. 1 to plate (g_1 to p)	<0,2	<0,15	μμF
Input g_1 to (k+h+g2+g3+s)	7,0	7,0	μμF
Output p to (k+h+g2+g3+s)	4,5	4,5	μμF

Ratings

Maximum plate voltage	300	volts
Maximum grid No. 2 voltage	300	volts
Maximum grid No. 2 supply voltage	500	volts
Maximum negative dc grid No. 1 voltage	100	volts
Minimum negative dc grid No. 1 voltage	0	volts
Maximum positive dc grid No. 1 voltage	0	volts
Maximum plate dissipation	6	watts
Maximum total plate dissipation	12	watts
Maximum grid No. 2 dissipation, no signal	1,25	watts
Maximum grid No. 2 dissipation, full signal (speech or music)	2,5	watts
Maximum cathode current (each section)	40	ma
Maximum bulb temperature	120° C	
Maximum grid circuit resistance		
Fixed bias	0,5	megohm
Self bias	2,0	megohms

Typical Operating Conditions and Characteristics, Power Amplifier

Plate voltage	250	volts
Grid No. 3 voltage	connected to pin No. 7	at socket
Grid No. 2 voltage	250	volts
Cathode resistor, common for both sections	160	ohms
Plate resistance (approx.)	0,08	megohm
Transconductance	6000	μmhos
Peak a-f signal voltage	6,0	volts
Zero signal plate current	24	ma
Zero signal grid No. 2 current	4,5	ma
Maximum signal plate current	26	ma
Maximum signal grid No. 2 current	9	ma
Load resistance	10 000	ohms
Total harmonic distortion	10	%
Power output	3	watts

Typical Operation Conditions and Characteristics
Push-Pull Class-B Amplifier

Plate voltage		250	volts
Grid No. 2 voltage		250	volts
Grid No. 1 voltage		-12	volts
Peak a-f signal voltage	2x	8,5	volts
Zero signal plate current	2x	11	ma
Zero signal grid No. 2 current	2x	2,3	ma
Maximum signal plate current	2x	28,5	ma
Maximum signal grid No. 2 current	2x	8,8	ma
Load resistance		10 000	ohms
Total harmonic distortion		5	%
Power output		9,2	watts

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