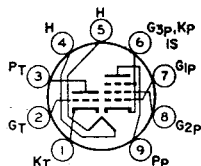


# 10JA8/ 10LZ8

## HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

Miniature type used in color and black-and-white television receiver applications. The triode unit is used as a sync separator, sync clipper, and phase inverter; the pentode unit is used as a video amplifier. Outlines section, 6E; requires miniature 9-contact socket.



9DX

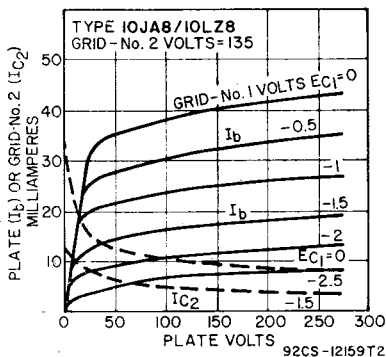
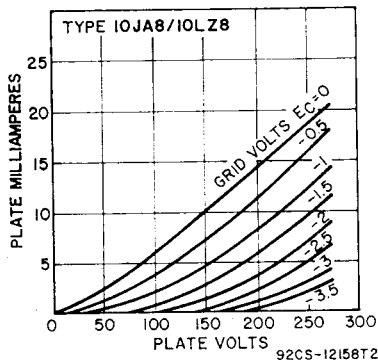
Heater Voltage (ac/dc)	10.5	volts
Heater Current	0.45	ampere
Heater Warm-up Time	11	seconds
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances:		
Triode Unit:		
Grid to Plate	4	pF
Grid to Cathode, Pentode Cathode, Heater, Pentode Grid No.3, and Internal Shield	2.6	pF
Plate to Cathode, Pentode Cathode, Heater, Pentode Grid No.3, and Internal Shield	2.6	pF
Pentode Unit:		
Grid No.1 to Plate	0.1 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	11	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	4.4	pF
Grid No.1 to Triode Plate	0.005 max	pF
Plate to Triode Grid	0.018 max	pF
Plate to Triode Plate	0.17 max	pF

### Class A<sub>1</sub> Amplifier

#### MAXIMUM RATINGS (Design-Maximum Values)

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

Triode Unit	Pentode Unit	
300	330	volts
—	330	volts
—	See curve page 300	
0	0	volts
1	5	watts
—	1.5	watts
—	See curve page 300	



#### CHARACTERISTICS

	Triode Unit		Pentode Unit			
Plate Voltage	135	200	30	135	200	volts
Grid-No.2 Voltage	—	—	135	135	135	volts
Grid-No.1 Voltage	—2	—2	0	—1.5	—1.5	volts
Amplification Factor	60	70	—	—	—	
Plate Resistance	39000	19000	—	66000	70000	ohms
Transconductance	1550	3700	—	12600	14000	μmhos

Plate Current .....	1	3.5	32*	17	18	mA
Grid-No.2 Current .....	—	—	14*	4.2	4	mA
Grid-No.1 Voltage (Approx.) for plate current of 10 $\mu$ A	-4.8	-7	—	-5	-5	volts

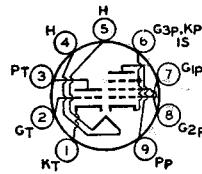
**MAXIMUM CIRCUIT VALUES**

Grid-No.1-Circuit Resistance:		<b>Triode Unit</b>	<b>Pentode Unit</b>	
For fixed-bias operation .....		0.5	0.25	megohm
For cathode-bias operation .....		1	1	megohm

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

Refer to type 6JT8.

10JT8



9DX

**MEDIUM-MU TRIODE—  
SHARP-CUTOFF PENTODE**

10JY8

Miniature type used in television receiver applications. The pentode unit is used as a video amplifier, and the triode unit as a sync separator. **Outlines section, 6E;** requires miniature 9-contact socket. **Heater:** volts (ac/dc), 10.5; amperes, 0.45; warm-up time (average), 11 seconds; maximum heater-cathode volts,  $\pm 200$  peak, 100 average (-300 peak, -200 average for triode unit).

**Class A<sub>1</sub> Amplifier**

**MAXIMUM RATINGS (Design-Maximum Values)**

	Triode Unit	Pentode Unit	
Plate Voltage .....	330	330	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	0	volts
Plate Dissipation .....	2	5	watts
Grid-No.2 Input:			
For Grid-No.2 voltages up to 165 volts .....	—	1.1	watts
For Grid-No.2 voltages between 165 and 330 volts .....	—	See curve page 300	

**CHARACTERISTICS**

Plate Voltage .....	125	50	200	volts
Grid-No.2 Voltage .....	—	150	150	volts
Grid-No.1 Voltage .....	—	0	—	volts
Cathode-Bias Resistor .....	68	—	100	ohms
Amplification Factor .....	46	—	—	
Plate Resistance (Approx.) .....	4400	—	55000	ohms
Transconductance .....	10400	—	11000	$\mu$ mhos
Plate Current .....	15	60*	24	mA
Grid-No.2 Current .....	—	18*	4.8	mA
Grid Voltage (Approx.) for plate current of 10 $\mu$ A ..	-8	—	-10	volts

**MAXIMUM CIRCUIT VALUES**

Grid-No.1-Circuit Resistance:			
For fixed-bias operation .....	0.5	0.25	megohm
For cathode-bias operation .....	1	1	megohm

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

Refer to type 6KR8.

10KR8

Refer to type 6KU8.

10KU8

Refer to chart at end of section.

10LB8

Refer to type 6LE8.

10LE8

Refer to chart at end of section.

10LW8

Refer to type 6LY8.

10LY8

Refer to chart at end of section.

10LZ8

For replacement use type 10JA8/10LZ8.

Refer to type 6T10.

10T10