

ELECTRONIC TUBE REFERENCE

4JW8

Voltage Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
PENTODE-TRIODE

Triode-pentode for television horizontal-oscillator and automatic-frequency-control service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	4.5 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	20000 Ω
TRANSCONDUCTANCE	0.0035 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1.4 W
MAXIMUM CATHODE CURRENT	10 mA
General Electric JEDEC states 4JW8 is electrically identical to 6JW8 apart from 4.5 V 600 mA heater rating and approximately 11-second controlled warm-up. Separate triode section serves horizontal AFC/reactance-tube operation: manufacturer maximum plate voltage 250 V, dissipation 1.4 W, cathode current 10 mA. Typical at Va 200 V, Vg -2 V: gm 3500 μmhos (0.0035 S), amplification factor 70, approximately 20 kΩ input/plate resistance as reported in 6JW8 characteristics. These characteristic values are typical, not maximum ratings. Triode interelectrode capacitances supplied by 6JW8 manufacturer; separate pentode is section 2.	

SECTION2 Pentode	
TRANSCONDUCTANCE	0.0055 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1.2 W
MAXIMUM SCREEN DISSIPATION	0.8 W
MAXIMUM CATHODE CURRENT	15 mA
<i>GE JEDEC 4JW8 electrically identical to 6JW8 except heater (4.5 V, 0.6 A, controlled warm-up approximately 11 seconds). Pentode provides television horizontal-oscillator service while separate triode serves reactance/AFC circuitry. Design-center operating maxima plate voltage 250 V, screen 250 V, plate dissipation 1.2 W, screen dissipation 0.8 W, cathode current 15 mA. Zero-plate-current voltage allowances 550 V are separate, not ordinary operating maxima. Typical pentode at Va 100 V, Vg2 100 V, Vg1 -1 V: Ia 6 mA, Ig2 1.7 mA, gm 5500 μmhos (0.0055 S). Published input, feedback, and interelectrode capacitances. Screen rating may depend on published operating conditions.</i>	

Triode-pentode for horizontal-oscillator and AFC service; electrically identical to 6JW8 except heater.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1964 RMA EIA

Published test conditions and operating points. Values on this page are preserved as reported by this source.

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Section 1 · Triode

CROSSREFERENCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cross-reference / electrical identity	6JW8	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Horizontal oscillator	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater warm-up time	11 s	—

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Section 2 · Pentode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	AFC / control pentode	—