



ELECTRONIC TUBE REFERENCE

12JN8

Voltage - Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Pentode-triode combination tube; available source material does not establish a narrower functional application confidently.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9FA	BASE PINS	9
NOMINAL HEATER	12.6 V / 225 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

9FA - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	B	G1 – Control Grid	CONNECTED
PIN2	B	P – Plate (Anode)	CONNECTED
PIN3	B	K – Cathode	CONNECTED
PIN4	–	H – Heater	CONNECTED
PIN5	–	H – Heater	CONNECTED
PIN6	A	P – Plate (Anode)	CONNECTED
PIN7	A	G2 – Screen Grid	CONNECTED
PIN8	A	G3 – Suppressor Grid	CONNECTED
PIN8	A	K – Cathode	CONNECTED
PIN8	–	IS – Internal Screen	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	5400 Ω
TRANSCONDUCTANCE	0.0085 S
AMPLIFICATION FACTOR	46
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2.5 W
<i>Sylvania 12JN8 medium-mu triode for television horizontal-deflection oscillator and general amplification. At V_a 125 V, grid -1 V: gm 8.5 mA/V, amplification factor 46 and plate resistance approximately 5400 ohms; anode current 13.5 mA. Maximum plate voltage 300 V and dissipation 2.5 W. Separate sharp-cutoff pentode section in same 12.6 V, 225 mA tube.</i>	

SECTION2 Pentode	
PLATE RESISTANCE	200000 Ω
TRANSCONDUCTANCE	0.0075 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.55 W
<i>Sylvania 12JN8 sharp-cutoff TV pentode used with triode oscillator in 12.6 V, 225 mA heater tube. Maximum plate 300 V, screen supply 300 V and plate dissipation 2.5 W, screen dissipation 0.55 W; actual operating screen voltage has rating-chart constraints. Typical at anode 125 V, screen 125 V, control grid -1 V: gm 7.5 mA/V and approximate plate resistance 200 kΩ, anode current 12 mA. Keep screen-supply maximum distinct from 125 V typical grid-2 voltage.</i>	

— e 12JN8 12JN8 Triode-Pentode. The 12JN8 is a miniature tube containing a medium-mu triode and a sharp-cutoff pentode. Except for

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