ELECTRONIC TUBE REFERENCE

8AU8A

Voltage - Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
PENTODE-TRIODE

Television triode-pentode for video/IF amplification and synchronization or sweep service.

General characteristics

BASE DESIGNATION	9DX	**BASE PINS**	9
NOMINAL HEATER	8.4 V / 450 mA	**PARALLEL HEATER**	– / –
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Dissimilar

9DX - Terminal pinout

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 2K	B	K – Cathode	CONNECTED
PIN2 – 2G1	B	G1 – Control Grid	CONNECTED
PIN3 – 2P	B	P – Plate (Anode)	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – H	–	H – Heater	CONNECTED
PIN6 – 1G3	A	G3 – Suppressor Grid	CONNECTED
PIN6 – IS	A	IS – Internal Screen	CONNECTED
PIN6 – 1K	A	K – Cathode	CONNECTED
PIN7 – 1G1	A	G1 – Control Grid	CONNECTED
PIN8 – 1G2	A	G2 – Screen Grid	CONNECTED
PIN9 – 1P	A	P – Plate (Anode)	CONNECTED

Section ratings

SECTION1 Pentode

PLATE RESISTANCE	150000 Ω
TRANSCONDUCTANCE	0.007 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM SCREEN DISSIPATION	1 W

SECTION2 Triode

PLATE RESISTANCE	6100 Ω
TRANSCONDUCTANCE	0.0049 S
AMPLIFICATION FACTOR	40
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	1.5 W

> The 8AU8A combines a sharp-cutoff pentode with a medium-mu triode for series-heater television receivers; the pentode suits video/IF service and the triode sync, clipper or sweep-oscillator functions.

SOURCE OPERATING CONDITIONS

1966 Tung Sol Electronic Tubes 2 of 4

SOURCE PDF

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

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 1 · Pentode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Plate_voltage	**200 V**	VideoAmplifier
Screen_voltage	**125 V**	VideoAmplifier
Cathode_bias_resistor	**82 ohm**	VideoAmplifier

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Plate_current	**15 mA**	VideoAmplifier
Screen_current	**3.4 mA**	VideoAmplifier
Transconductance	**7000 uS**	VideoAmplifier

CAPACITANCE		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Grid-to-plate capacitance	**0.06 pF**	—
Input capacitance	**7.5 pF**	—
Output capacitance	**3.4 pF**	—

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 2 · Triode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Plate_voltage	**150 V**	SyncAmplifier
Cathode_bias_resistor	**150 ohm**	SyncAmplifier
Heater_warmup_time	**11 s**	SyncAmplifier

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate_current	**9 mA**	SyncAmplifier
Amplification_factor	**40**	SyncAmplifier
Plate_resistance	**6100 ohm**	SyncAmplifier
Transconductance	**4900 uS**	SyncAmplifier

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	**2.2 pF**	—
Input capacitance	**2.6 pF**	—
Output capacitance	**0.34 pF**	—

Tube Tinker

An independent reference for electronic tubes, vacuum tubes, and their source documents.

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