ELECTRONIC TUBE REFERENCE

10CW5

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PENTODE

Power pentode designed for vertical-deflection amplifier service in color and black-and-white television receivers. Its output capability is intended to drive the vertical scanning system rather than ordinary small-signal amplification.

General characteristics

BASE DESIGNATION	9CV	**BASE PINS**	9
NOMINAL HEATER	10.6 V / 450 mA	**PARALLEL HEATER**	— / —
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

9CV - Terminal pinout

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 — IC	—	—	IC
PIN2 — G1	A	G1 — Control Grid	CONNECTED
PIN3 — G3	A	G3 — Suppressor Grid	CONNECTED
PIN3 — K	A	K — Cathode	CONNECTED
PIN4 — H	—	H — Heater	CONNECTED
PIN5 — H	—	H — Heater	CONNECTED
PIN6 — IC	—	—	IC
PIN7 — P	A	P — Plate (Anode)	CONNECTED
PIN8 — IC	—	—	IC
PIN9 — G2	A	G2 — Screen Grid	CONNECTED

Section ratings

SECTION1 Pentode	
PLATE RESISTANCE	26000 Ω
TRANSCONDUCTANCE	0.011 S
MAXIMUM PLATE VOLTAGE	275 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	12 W
MAXIMUM SCREEN DISSIPATION	2.1 W
MAXIMUM CATHODE CURRENT	110 mA
Promoted from published ratings/characteristics where directly applicable; additional published values retained in TUBE_SECTION_PARAMETER.	

Power pentode used for vertical-deflection amplifier service in color and black-and-white television receivers.

SOURCE OPERATING CONDITIONS

1975 RCA RC30

SOURCE PDF

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

1975 RCA RC30

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc) 8 10.6	**15 V**	Published in approved XL86 target datasheet entry; Section1
Heater Current 0.76 0.6 0.45	**300 mA**	Published in approved XL86 target datasheet entry; Section1
Plate Supply Voltage	**600 V**	Published in approved XL86 target datasheet entry; Section1
Grid-No.2 Voltage	**220 V**	Published in approved XL86 target datasheet entry; Section1
Grid-No.2 (Screen-Grid) Supply Voltage	**600 V**	Published in approved XL86 target datasheet entry; Section1
Grid-No.2 Input	**2.1 W**	Published in approved XL86 target datasheet entry; Section1
Peak Grid-No.2 Input	**7 W**	Published in approved XL86 target datasheet entry; Section1
Plate Voltage	**170 V**	Published in approved XL86 target datasheet entry; Section1
Grid-No.l-Circuit Resistance	**1 MΩ**	Published in approved XL86 target datasheet entry; Section1
Plate Voltage	**275 V**	Published in approved XL86 target datasheet entry; Section1
Peak Positive-Pulse Plate Voltage#	**2200 V**	Published in approved XL86 target datasheet entry; Section1
Grid-No.2 Voltage	**275 V**	Published in approved XL86 target datasheet entry; Section1
Peak Negative-Pulse Grid-No.l Voltage	**250 V**	Published in approved XL86 target datasheet entry; Section1
Peak Cathode Current	**240 mA**	Published in approved XL86 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Average Cathode Current	**110 mA**	Published in approved XL86 target datasheet entry; Section1
Plate Dissipation	**12 W**	Published in approved XL86 target datasheet entry; Section1
Grid-No.l-Circuit Resistance	**2.2 MΩ**	Published in approved XL86 target datasheet entry; Section1
# Pulse duration must not exceed 6 r/, of a vertical scanning cycle (	**1.2 milliseconds**	Published in approved XL86 target datasheet entry; Section1

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.l to Plate	**0.6 pF**	Published in approved XL86 target datasheet entry; Section1
Grid No.l to Cathode, Heater, Grid No.2, and Grid No.3	**13 pF**	Published in approved XL86 target datasheet entry; Section1
Plate to Cathode, Heater, Grid No.2, and Grid No.3	**6.8 pF**	Published in approved XL86 target datasheet entry; Section1

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.2 Voltage	**170 V**	Published in approved XL86 target datasheet entry; Section1
Grid-No.l (Control-Grid) Voltage	**12.5 V**	Published in approved XL86 target datasheet entry; Section1
Plate Resistance	**26000 Ω**	Published in approved XL86 target datasheet entry; Section1
Transconductance	**11000 µS**	Published in approved XL86 target datasheet entry; Section1
Plate Current	**70 mA**	Published in approved XL86 target datasheet entry; Section1
Grid-No.2 Current	**3.5 mA**	Published in approved XL86 target datasheet entry; Section1

Tube Tinker

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

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