ELECTRONIC TUBE REFERENCE

23JS6A

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
BEAMPOWER

> Duodecar beam-power tube designed as a horizontal-deflection amplifier in color and black-and-white television receivers.

General characteristics

BASE DESIGNATION	12FY	**BASE PINS**	12
NOMINAL HEATER	23.6 V / 600 mA	**PARALLEL HEATER**	— / —
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

12FY - Terminal pinout

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	—	H — Heater	CONNECTED
PIN2	—	K — Cathode	CONNECTED
PIN3	—	G2 — Screen Grid	CONNECTED
PIN4	—	G3 — Suppressor Grid	CONNECTED
PIN5	—	G1 — Control Grid	CONNECTED
PIN7	—	—	IC
PIN9	—	—	IC
PIN10	—	G3 — Suppressor Grid	CONNECTED
PIN11	—	G2 — Screen Grid	CONNECTED
PIN12	—	H — Heater	CONNECTED
CAP1	A	P — Plate (Anode)	CONNECTED

Section ratings

SECTION1 Beam Power	
PLATE RESISTANCE	5500 Ω
TRANSCONDUCTANCE	0.0115 S
MAXIMUM PLATE VOLTAGE	990 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	30 W
MAXIMUM SCREEN DISSIPATION	5.5 W
MAXIMUM CATHODE CURRENT	350 mA
Published electrical data extracted from the approved RCA source; pulse-only ratings are retained in parameter rows rather than promoted as continuous ratings.	

Duodecar beam-power tube used as a horizontal-deflection amplifier 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 · Beam Power

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Heater Voltage (ac/dc) 6.3 23.6	**31.5 V**	Published in approved 31JS6C target datasheet entry; Section1
Heater Current 2.25 0.6	**450 mA**	Published in approved 31JS6C target datasheet entry; Section1
Heater Warm-up Tme (Average) a 1	**1 seconds**	Published in approved 31JS6C target datasheet entry; Section1
Plate Resistance (Approx.) _ _	**5500 Ω**	Published in approved 31JS6C target datasheet entry; Section1
Plate Current — — OOOv	**130 mA**	Published in approved 31JS6C target datasheet entry; Section1
current of	**1 mA**	Published in approved 31JS6C target datasheet entry; Section1
Peak Positive-Pulse Plate Voltage#	**7500 V**	Published in approved 31JS6C target datasheet entry; Section1
Peak Negative-Pulse Plate Voltage	**1200 V**	Published in approved 31JS6C target datasheet entry; Section1
DC Grid-No.2 Voltage	**220 V**	Published in approved 31JS6C target datasheet entry; Section1
Peak Negative-Pulse Grid-No. 1 Voltage	**330 V**	Published in approved 31JS6C target datasheet entry; Section1
Average Cathode Current	**350 mA**	Published in approved 31JS6C target datasheet entry; Section1
Peak Cathode Current	**1200 mA**	Published in approved 31JS6C target datasheet entry; Section1
Plate Dissipation"*	**30 W**	Published in approved 31JS6C target datasheet entry; Section1
Grid-No.2 Input	**5.5 W**	Published in approved 31JS6C target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Bulb Temperature (At hottest point)	**225 °C**	Published in approved 31JS6C target datasheet entry; Section1
For grid bias feedback HV regulation	**0.47 MΩ**	Published in approved 31JS6C target datasheet entry; Section1
For dc or pulse shunt HV regulation	**10 MΩ**	Published in approved 31JS6C target datasheet entry; Section1
# Pulse duration must not exceed 15',y of one horizontal scanning cycle (	**10 microseconds**	Published in approved 31JS6C target datasheet entry; Section1

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.l to Cathode, Heater, Grid No.2, and Grid No.S	**24 pF**	Published in approved 31JS6C target datasheet entry; Section1
Plate to Cathode, Heater, Grid No.2, and Grid No.3	**10 pF**	Published in approved 31JS6C target datasheet entry; Section1

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.2 (Screen-Grid) Voltage ... 125 125 125	**125 V**	Published in approved 31JS6C target datasheet entry; Section1
Grid-No. 1 (Control-Grid) Voltage .... —25 — 0	**25 V**	Published in approved 31JS6C target datasheet entry; Section1

Tube Tinker

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

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