



ELECTRONIC TUBE REFERENCE

35LR6

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

High-transconductance Duodecar beam-power tube for horizontal-deflection output in color and monochrome television receivers, with roughly 30 W plate dissipation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12FY	BASE PINS	12
NOMINAL HEATER	35 V / 450 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	5300 Ω
TRANSCONDUCTANCE	0.016 S
AMPLIFICATION FACTOR	3.5
MAXIMUM PLATE VOLTAGE	990 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	30 W
MAXIMUM CATHODE CURRENT	375 mA
<i>Published ratings and characteristics promoted where clearly stated; identical repeated diode/triode sections compressed where applicable.</i>	

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



SOURCE OPERATING CONDITIONS

1940 RCA

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

1940 RCA

Section 1 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	35 V	Published nominal value
Heater current	450 mA	Published nominal value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Horizontal-deflection amplifier	Television



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 RCA RC30

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	35 V	Published in approved 35LR6 target datasheet entry; Section1
Heater Warm-up Time (Average)	11 seconds	Published in approved 35LR6 target datasheet entry; Section1
Grid-No. 2 Current 38t 2.4	35 mA	Published in approved 35LR6 target datasheet entry; Section1
plate current of	1 mA	Published in approved 35LR6 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC Plate Supply Voltage	990 V	Published in approved 35LR6 target datasheet entry; Section1
Peak Positive- Plate Pulse Voltage (Absolute Maximum)	7500 V	Published in approved 35LR6 target datasheet entry; Section1
Peak Negative-Pulse Plate Voltage	1100 V	Published in approved 35LR6 target datasheet entry; Section1
Positive Grid-No.3 Voltage	75 V	Published in approved 35LR6 target datasheet entry; Section1
DC Grid-No. 2 Voltage	220 V	Published in approved 35LR6 target datasheet entry; Section1
Peak Negative-Pulse Grid-No.1 Voltage	330 V	Published in approved 35LR6 target datasheet entry; Section1
Average Cathode Current	375 mA	Published in approved 35LR6 target datasheet entry; Section1
Peak Cathode Current	1300 mA	Published in approved 35LR6 target datasheet entry; Section1
Plate Dissipation	30 W	Published in approved 35LR6 target datasheet entry; Section1
Grid-No.2 Input	5 W	Published in approved 35LR6 target datasheet entry; Section1
Bias feedback high-voltage regulation	0.47 MΩ	Published in approved 35LR6 target datasheet entry; Section1
DC or pulse shunt high-voltage regulation	10 MΩ	Published in approved 35LR6 target datasheet entry; Section1
Heater Voltage 6.3 21	31.5 V	Published in approved 35LR6 target datasheet entry; Section1
Heater Current 1.5 0.45	300 mA	Published in approved 35LR6 target datasheet entry; Section1
Heater Warm-up Time . 11	11 seconds	Published in approved 35LR6 target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage 125 60 175	60 V	Published in approved 35LR6 target datasheet entry; Section1
Grid-No.2 (Screen-Grid) Voltage 125 115 110	110 V	Published in approved 35LR6 target datasheet entry; Section1
Grid-No.1 (Control-Grid) Voltage -20	-20 V	Published in approved 35LR6 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx.) - - 5300	0 Ω	Published in approved 35LR6 target datasheet entry; Section1
Transconductance (Grid No.1 to Plate)	16000 μS	Published in approved 35LR6 target datasheet entry; Section1
Plate Current 740f 140	700 mA	Published in approved 35LR6 target datasheet entry; Section1
Plate Voltage 250 45 135	120 V	Published in approved 35LR6 target datasheet entry; Section1
Grid-No.1 (Control-Grid) Voltage -4 0 -10	-10 V	Published in approved 35LR6 target datasheet entry; Section1
Plate Resistance Approx.) 14000	14000 Ω	Published in approved 35LR6 target datasheet entry; Section1
Plate Current 2.S 200	51 mA	Published in approved 35LR6 target datasheet entry; Section1
For plate current of	1 mA	Published in approved 35LR6 target datasheet entry; Section1

TUBE TINKER

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