

ELECTRONIC TUBE REFERENCE

12JT6

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

The 12JT6 is a nine-pin Novar beam-power pentode designed for horizontal-deflection output amplification in television receivers. Featuring a 12.6-volt, 600-milliampere heater, it provides high peak plate-current capability, substantial pulse-voltage tolerance, and efficient sweep-circuit operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9QU	BASE PINS	9
NOMINAL HEATER	12.6 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9QU - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	15000 Ω
TRANSCONDUCTANCE	0.0071 S
AMPLIFICATION FACTOR	4.4
MAXIMUM PLATE VOLTAGE	770 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	17.5 W
MAXIMUM SCREEN DISSIPATION	3.5 W
MAXIMUM CATHODE CURRENT	550 mA

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1970 Sylvania Technical Manual

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

1970 SYLVANIA TECHNICAL MANUAL

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	—
Average cathode current	175 mA	Maximum average cathode current; Sylvania 1970
Screen Voltage	150 V	—
Peak positive pulse plate voltage	6500 V	Peak positive plate pulse; Sylvania 1970
Grid Voltage	-22.5 V	—
Peak negative pulse plate voltage	-1500 V	Peak negative plate pulse; Sylvania 1970
Plate Current	70 mA	—
Positive DC beam-plate voltage	70 V	DC grid 3 maximum; Sylvania 1970
Screen Current	2.1 mA	—
Grid #1 voltage	55 V	Maximum negative DC grid 1 voltage (magnitude); Sylvania 1970
Grid To Plate Capacitance	0.26 pF	—
Peak negative grid #1 voltage	-330 V	Peak negative control-grid pulse; Sylvania 1970
Input Capacitance	15 pF	—
For grid bias feedback HV regulation	1 MOhm	Maximum grid 1 circuit resistance, grid-resistor-bias operation; Sylvania 1970
Output Capacitance	6.5 pF	—
Grid #1 voltage	-42 V	Grid 1 voltage at Ib=1 mA; Sylvania 1970
Plate voltage	60 V	Instantaneous knee, screen=150V, grid 1=0V; Sylvania 1970

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	390 mA	Instantaneous plate knee, plate=60V; Sylvania 1970
Grid #2 current	32 mA	Instantaneous screen knee, plate=60V; Sylvania 1970
Bulb Temperature (At hottest point)	240 degC	Maximum bulb temperature; Sylvania 1970
Heater warm-up time	11 s	Average heater warm-up time; Sylvania 1970
Peak Heater-Cathode Voltage	200 V	Heater negative relative to cathode, DC and peak; Sylvania 1970
Peak Heater-Cathode Voltage	100 V	Heater positive relative to cathode, DC; Sylvania 1970
Peak Heater-Cathode Voltage	200 V	Heater positive relative to cathode, DC and peak; Sylvania 1970

TUBE TINKER

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