

ELECTRONIC TUBE REFERENCE

6BH11

Voltage - Dual Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

PENTODE-TRIODE-TRIODE

Television Duodecar combining two medium-mu general-purpose triodes with a sharp-cutoff pentode specifically intended for horizontal-deflection oscillator service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12FP	BASE PINS	12
NOMINAL HEATER	6.3 V / 800 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

12FP - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	H – Heater	CONNECTED
PIN2	C	K – Cathode	CONNECTED
PIN3	C	P – Plate (Anode)	CONNECTED
PIN4	C	G1 – Control Grid	CONNECTED
PIN5	B	K – Cathode	CONNECTED
PIN6	B	G1 – Control Grid	CONNECTED
PIN7	B	P – Plate (Anode)	CONNECTED
PIN8	A	G1 – Control Grid	CONNECTED
PIN9	A	G2 – Screen Grid	CONNECTED
PIN10	A	P – Plate (Anode)	CONNECTED
PIN11	A	K – Cathode	CONNECTED
PIN12	–	H – Heater	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	200000 Ω
TRANSCONDUCTANCE	0.0175 S
MAXIMUM PLATE VOLTAGE	350 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Sharp-cutoff pentode; peak cathode current 300 mA and average cathode current 20 mA in horizontal-deflection oscillator service.</i>	

SECTION2 Triode	
PLATE RESISTANCE	5400 Ω
TRANSCONDUCTANCE	0.0085 S
AMPLIFICATION FACTOR	46
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2.5 W
<i>Representative row for the two electrically identical triode sections; small capacitance differences are preserved by physical-section condition.</i>	

SECTION3 Triode	
PLATE RESISTANCE	5400 Ω
TRANSCONDUCTANCE	0.0085 S
AMPLIFICATION FACTOR	46
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2.5 W
<i>Second physical triode section; added to align physical rows with SectionCount.</i>	

Duodecar combination tube with two medium-mu triodes for general-purpose service and a sharp-cutoff pentode intended for horizontal-deflection oscillator operation in television receivers.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen Supply Voltage	330 V	—
PeakNegativeGrid1Voltage	175 V	—
Peak Cathode Current	300 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	125 V	AverageCharacteristics
Screen Voltage	125 V	AverageCharacteristics
Grid1 Voltage	-1 V	AverageCharacteristics
Plate Current	12 mA	AverageCharacteristics
Screen Current	4 mA	AverageCharacteristics
Grid1VoltageAtPlateCurrent10uA	-8 V	AverageCharacteristics

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid1 To Plate Capacitance	0.11 pF	—
Input Capacitance	5.5 pF	—
Output Capacitance	2.2 pF	—

1968 GENERAL ELECTRIC CO

Section 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	125 V	EachTriode
Grid Voltage	-1 V	EachTriode

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	13.5 mA	EachTriode
GridVoltageAtPlateCurrent10uA	-8 V	EachTriode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid To Plate Capacitance	1.7 pF	Section1
Input Capacitance	3.2 pF	Section1
Output Capacitance	1.4 pF	Section1
Grid To Plate Capacitance	1.8 pF	Section2
Input Capacitance	3 pF	Section2
Output Capacitance	0.6 pF	Section2



SOURCE DATA APPENDIX

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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	ClassA
Screen-grid voltage	125 V	ClassA
Grid voltage	-1 V	ClassA
Plate current	12 mA	ClassA
Screen-grid current	4 mA	ClassA
Average cathode current	20 mA	HorizontalDeflectionOscillator
Peak cathode current	300 mA	HorizontalDeflectionOscillator

1975 RCA RC30

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	ClassA;EachTriode
Grid voltage	-1 V	ClassA;EachTriode
Plate current	13.5 mA	ClassA;EachTriode

TUBE TINKER

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