



ELECTRONIC TUBE REFERENCE

6AF11

Voltage Dual Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

PENTODE-TRIODE-TRIODE

Three-section television tube combining AGC-keyer and sync-separator triodes with a sharp-cutoff video-amplifier pentode.

GENERAL CHARACTERISTICS

BASE DESIGNATION	E12-70	BASE PINS	12
NOMINAL HEATER	6.3 V / 1.05 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	12400 Ω
TRANSCONDUCTANCE	0.0055 S
AMPLIFICATION FACTOR	68
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	1.1 W
High-mu triode; AGC keyer service.	

SECTION2 Triode	
PLATE RESISTANCE	9400 Ω
TRANSCONDUCTANCE	0.0044 S
AMPLIFICATION FACTOR	41
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2 W
<i>Medium-mu triode; sync-separator service.</i>	

SECTION3 Pentode	
PLATE RESISTANCE	68000 Ω
TRANSCONDUCTANCE	0.011 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	5 W
MAXIMUM SCREEN DISSIPATION	1.25 W
<i>Sharp-cutoff pentode; video-amplifier service.</i>	

Dual-triode plus sharp-cutoff pentode television tube: AGC keyer, sync separator, and video amplifier sections.



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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltageNominal	6.3 V	—
HeaterOrFilamentCurrentNominal	1.05 A	—
Maximum Plate Voltage	330 V	—
Maximum Plate Dissipation	1.1 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	12400 Ohm	—
Transconductance	5500 uS	—
Amplification Factor	68	—

1968 GENERAL ELECTRIC CO

Section 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	9400 Ohm	—
Transconductance	4400 uS	—
Amplification Factor	41	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	330 V	—
Maximum Plate Dissipation	2 W	—

1968 GENERAL ELECTRIC CO

Section 3 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	68000 Ohm	—
Transconductance	11000 uS	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	330 V	—
Maximum Plate Dissipation	5 W	—
Maximum Screen Dissipation	1.25 W	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 RCA RC30

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1975 RCA RC30

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage	200 V	Section1
Amplification Factor	68	Section1
Plate Resistance	12400 ohm	Section1
Transconductance	5500 uS	Section1

1975 RCA RC30

Section 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage	200 V	Section2
Cathode Bias Resistor	220 ohm	Section2
Amplification Factor	41	Section2
Plate Resistance	9400 ohm	Section2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	4400 uS	Section2

1975 RCA RC30

Section 3 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage	250 V	Section3
Grid No.2 Supply Voltage	150 V	Section3
Cathode Bias Resistor	100 ohm	Section3
Plate Resistance	68000 ohm	Section3
Transconductance	11000 uS	Section3