



ELECTRONIC TUBE REFERENCE

7GS7

Voltage Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Combined triode-pentode for oscillator, mixer, frequency-converter, RF, or IF service in television, communications, or mobile receivers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	7 V / 450 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION 1 Triode	
PLATE RESISTANCE	5000 Ω
TRANSCONDUCTANCE	0.0055 S
AMPLIFICATION FACTOR	17
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	15 mA
<i>Published ratings/characteristics promoted from supplied source; additional conditions retained in parameter table.</i>	

SECTION2 Pentode	
PLATE RESISTANCE	435000 Ω
TRANSCONDUCTANCE	0.012 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	18 mA
<i>Published ratings/characteristics promoted from supplied source; additional conditions retained in parameter table.</i>	

Medium-mu triode and sharp-cutoff pentode frequency changer for VHF television tuners.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1964 RMA EIA

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

1964 RMA EIA

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	7 V	—
Heater Current	450 mA	—
Plate Voltage	100 V	—
Plate Current	14 mA	—
Transconductance	5500 μ S	—
Amplification Factor	17	—
Plate Resistance	5000 ohm	—
Application	VHF frequency changer	—

1964 RMA EIA

Section 2 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	150 V	—
Screen Voltage	150 V	—
Plate Current	10 mA	—
Transconductance	12000 μ S	—
PlateResistanceMinimum	435000 ohm	—
Application	VHF mixer	—

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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Heater-Cathode Voltage	200 V	AbsoluteValue
Average Heater-Cathode Voltage	100 V	AbsoluteValue

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	100 V	ClassA;TriodeUnit
Typical Plate Current	14 mA	ClassA;TriodeUnit

1975 RCA RC30

Section 2 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	170 V	ClassA;PentodeUnit
Typical Screen Voltage	150 V	ClassA;PentodeUnit
Typical Plate Current	10 mA	ClassA;PentodeUnit
Typical Screen Current	3.3 mA	ClassA;PentodeUnit
Conversion Transconductance	4500 uS	FrequencyChanger