

ELECTRONIC TUBE REFERENCE

6C9

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TETRODE-TETRODE

Sharp-cutoff dual tetrode designed for VHF RF-amplifier and autodyne mixer service in receiver front ends.

GENERAL CHARACTERISTICS

BASE DESIGNATION	10F	BASE PINS	10
NOMINAL HEATER	6.3 V / 400 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

10F - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Tetrode	
PLATE RESISTANCE	100000 Ω
TRANSCONDUCTANCE	0.008 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	180 V
MAXIMUM PLATE DISSIPATION	1.5 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Two identical tetrode sections; represented once under identical-section compression.</i>	

SECTION2 Tetrode	
PLATE RESISTANCE	100000 Ω
TRANSCONDUCTANCE	0.008 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	180 V
MAXIMUM PLATE DISSIPATION	1.5 W
<i>Added approved missing second physical tetrode section; RCA specifies per-unit ratings for either plate and both units operating.</i>	

Sharp-cutoff dual tetrode used as a VHF RF amplifier and autodyne mixer tube.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Tetrode

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Primary application	VHF RF amplifier / autodyne mixer	—



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 · Tetrode

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc) 6.3	16.8 V	Published in approved 6C9 target datasheet entry; Section1
Heater Current 0.4	150 mA	Published in approved 6C9 target datasheet entry; Section1
Plate Voltage	250 V	Published in approved 6C9 target datasheet entry; Section1
Grid-No.2 (Screen-Grid) Supply Voltage	180 V	Published in approved 6C9 target datasheet entry; Section1
Either plate	1.5 W	Published in approved 6C9 target datasheet entry; Section1
Both plates (both units operating)	2.5 W	Published in approved 6C9 target datasheet entry; Section1
For erid-No.2 voltages up to	90 V	Published in approved 6C9 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
For erid-No.2 voltages up to 90 volts	0.5 W	Published in approved 6C9 target datasheet entry; Section1
For grid-No.2 voltages between 90 and	180 V	Published in approved 6C9 target datasheet entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Internal Shield 4.4	4.2 pF	Published in approved 6C9 target datasheet entry; Section1
Internal Shield 2.2	2.2 pF	Published in approved 6C9 target datasheet entry; Section1
Heater to Cathode 4.2	4.8 pF	Published in approved 6C9 target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	125 V	Published in approved 6C9 target datasheet entry; Section1
Grid-No.2 Voltage	80 V	Published in approved 6C9 target datasheet entry; Section1
Grid-No. 1 Voltage	-1 V	Published in approved 6C9 target datasheet entry; Section1
Plate Resistance (Approx.)	0.1 MΩ	Published in approved 6C9 target datasheet entry; Section1
Plate Current	10 mA	Published in approved 6C9 target datasheet entry; Section1
Grid-No.2 Current	1.5 mA	Published in approved 6C9 target datasheet entry; Section1

TUBE TINKER

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