

ELECTRONIC TUBE REFERENCE

6664

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

High-mu triode for mobile-communications amplifier and oscillator service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7BD	BASE PINS	7
NOMINAL HEATER	6.3 V / 150 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7BD - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	10900 Ω
TRANSCONDUCTANCE	0.0055 S
AMPLIFICATION FACTOR	60
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2.9 W
MAXIMUM CATHODE CURRENT	12 mA
<i>Alias/co-designation of 6AB4;</i>	

High-mu triode for mobile-communications amplifier and oscillator service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	180 V	Published handbook rating
Maximum screen voltage	125 V	Published handbook rating
Plate voltage	120 V	ClassA
Screen voltage	120 V	ClassA
Plate current	7.5 mA	ClassA
Screen current	2.5 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	340000 ohm	Published handbook characteristic
Transconductance	5000 μ S	Published handbook characteristic
Heater/filament voltage	6.3 V	Published heater/filament rating
Heater/filament current	175 mA	Published heater/filament rating

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	4 pF	Published capacitance column
Output capacitance	2.9 pF	Published capacitance column
Grid-to-plate capacitance	0.02 pF	Published capacitance column

1971 RCA HB3 Binder 3 of 7

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

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Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Nominal
Heater current	150 mA	Nominal
Maximum plate voltage	330 V	Promoted published value
Maximum plate dissipation	2.9 W	Promoted published value
/^~ Voltage (AC or DC)	6.3 V	Heater Characteristics and Ratings (Absolute-Maximum Values):
Current at heater volts =	150 V	Heater Characteristics and Ratings (Absolute-Maximum Values):
respect to cathode	100 V	Heater Characteristics and Ratings (Absolute-Maximum Values):
PLATE VOLTAGE	330 V	Maximum Ratings, Absolute -Maximum Values:
PLATE DISSIPATION	2.9 W	Maximum Ratings, Absolute -Maximum Values:
to voltage variations as great as t	20 V	Maximum Ratings, Absolute -Maximum Values:
With heater volts =	250 V	Maximum Ratings, Absolute -Maximum Values:
cathode resistor (ohms) bypassed =	200 ohm	Maximum Ratings, Absolute -Maximum Values:

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	10900 ohm	Promoted published value
Transconductance	5500 uS	Promoted published value
Amplification factor	60	Promoted published value
Plate Supply Voltage	250 V	Characteristics, Clasa A I ,Ampl ifier:
Cathode Resistor	200 ohm	Characteristics, Clasa A I ,Ampl ifier:
Plate Resistance (Approx)	10900 ohm	Characteristics, Clasa A I ,Ampl ifier:
Transconductance	5500 uS	Characteristics, Clasa A I ,Ampl ifier:
Plate Current	10 mA	Characteristics, Clasa A I ,Ampl ifier:

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
r'_p for plate $\mu_a =$	-12 V	Characteristics, Clasa A I ,Ampl ifier: