



ELECTRONIC TUBE REFERENCE

50BM8

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Triode/power-pentode combination for compact audio and receiver circuits, with a 7 W pentode output section.

GENERAL CHARACTERISTICS

BASE DESIGNATION	E9-1	BASE PINS	9
NOMINAL HEATER	50 V / 100 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.0025 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	15 mA
Voltage-amplifier triode plus power-output pentode; supplied page refers all other electrical data to 6BM8/ECL82 and does not reproduce it.	

SECTION2 Pentode	
PLATE RESISTANCE	15000 Ω
TRANSCONDUCTANCE	0.0068 S
AMPLIFICATION FACTOR	9.5
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	7 W
MAXIMUM SCREEN DISSIPATION	1.8 W
MAXIMUM CATHODE CURRENT	50 mA
<i>Voltage-amplifier triode plus power-output pentode; supplied page refers all other electrical data to 6BM8/ECL82 and does not reproduce it.</i>	

High-mu triode plus power pentode used in television vertical circuits and as an audio-frequency output tube.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Hitachi

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

1963 HITACHI

Section 1 · Triode

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Interelectrode capacitances published	1	See source table



SOURCE OPERATING CONDITIONS

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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
Input Resistance at frequency of	50 MHz	Published in approved ECL82 target datasheet entry; Section1
Equivalent Noise Resistance	1500 Ω	Published in approved ECL82 target datasheet entry; Section1
For fixed-bias operation 0.5	0.5 M Ω	Published in approved ECL82 target datasheet entry; Section1
For cathode-bias operation 0.5	1 M Ω	Published in approved ECL82 target datasheet entry; Section1
Heater Voltage 6.3	50 V	Published in approved ECL82 target datasheet entry; Section1
Heater Current 0.78	100 mA	Published in approved ECL82 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage 550	900 V	Published in approved ECL82 target datasheet entry; Section1
Plate Voltage 300	600 V	Published in approved ECL82 target datasheet entry; Section1
Grid-No.2 Supply Voltage	550 V	Published in approved ECL82 target datasheet entry; Section1
Plate Dissipation 1	7 W	Published in approved ECL82 target datasheet entry; Section1
Grid-No.2 Input	1.8 W	Published in approved ECL82 target datasheet entry; Section1
Plate Voltage 100	200 V	Published in approved ECL82 target datasheet entry; Section1
For fixed-bias operation I	1 MΩ	Published in approved ECL82 target datasheet entry; Section1
For cathode-bias operation 2	2 MΩ	Published in approved ECL82 target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx.)	0.02 MΩ	Published in approved ECL82 target datasheet entry; Section1
Transconductance 2500	6400 μS	Published in approved ECL82 target datasheet entry; Section1
Plate Current 3.5	35 mA	Published in approved ECL82 target datasheet entry; Section1
Grid-No.2 Current	7 mA	Published in approved ECL82 target datasheet entry; Section1

1975 RCA RC30

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input Resistance at frequency of	50 MHz	Published in approved ECL82 target datasheet entry; Section2
Equivalent Noise Resistance	1500 Ω	Published in approved ECL82 target datasheet entry; Section2
For fixed-bias operation 0.5	0.5 MΩ	Published in approved ECL82 target datasheet entry; Section2
For cathode-bias operation 0.5	1 MΩ	Published in approved ECL82 target datasheet entry; Section2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage 6.3	50 V	Published in approved ECL82 target datasheet entry; Section2
Heater Current 0.78	100 mA	Published in approved ECL82 target datasheet entry; Section2
Plate Supply Voltage 550	900 V	Published in approved ECL82 target datasheet entry; Section2
Plate Voltage 300	600 V	Published in approved ECL82 target datasheet entry; Section2
Grid-No.2 Supply Voltage	550 V	Published in approved ECL82 target datasheet entry; Section2
Plate Dissipation 1	7 W	Published in approved ECL82 target datasheet entry; Section2
Grid-No.2 Input	1.8 W	Published in approved ECL82 target datasheet entry; Section2
Plate Voltage 100	200 V	Published in approved ECL82 target datasheet entry; Section2
For fixed-bias operation I	1 MΩ	Published in approved ECL82 target datasheet entry; Section2
For cathode-bias operation 2	2 MΩ	Published in approved ECL82 target datasheet entry; Section2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx.)	0.02 MΩ	Published in approved ECL82 target datasheet entry; Section2
Transconductance 2500	6400 μS	Published in approved ECL82 target datasheet entry; Section2
Plate Current 3.5	35 mA	Published in approved ECL82 target datasheet entry; Section2
Grid-No.2 Current	7 mA	Published in approved ECL82 target datasheet entry; Section2

TUBE TINKER

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