

ELECTRONIC TUBE REFERENCE

8BQ11

Voltage - Dual Pentode electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
PENTODE-PENTODE

Semiremote-cutoff dual pentode intended for television intermediate-frequency amplification, integrating two controlled-gain pentode stages in one Compactron envelope.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12DM	BASE PINS	12
NOMINAL HEATER	8.4 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

12DM - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	H – Heater	CONNECTED
PIN2	B	P – Plate (Anode)	CONNECTED
PIN3	B	G2 – Screen Grid	CONNECTED
PIN4	B	G3 – Suppressor Grid	CONNECTED
PIN5	B	G1 – Control Grid	CONNECTED
PIN6	B	K – Cathode	CONNECTED
PIN7	A	G3 – Suppressor Grid	CONNECTED
PIN7	–	IS – Internal Screen	CONNECTED
PIN8	A	P – Plate (Anode)	CONNECTED
PIN9	A	G2 – Screen Grid	CONNECTED
PIN10	A	G1 – Control Grid	CONNECTED
PIN11	A	K – Cathode	CONNECTED
PIN12	–	H – Heater	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	200000 Ω
TRANSCONDUCTANCE	0.0105 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	3.1 W
<i>Remote-cutoff Section 1. Uploaded sheet is reference/equivalence-only: it states identity to 11BQ11 except heater characteristics and does not reproduce the referenced electrical tables; promoted values intentionally not inferred.</i>	

SECTION2 Pentode	
PLATE RESISTANCE	200000 Ω
TRANSCONDUCTANCE	0.013 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	3.1 W
<i>Sharp-cutoff Section 2. Uploaded sheet is reference/equivalence-only: it states identity to 11BQ11 except heater characteristics and does not reproduce the referenced electrical tables; promoted values intentionally not inferred.</i>	

Semiremote-cutoff dual pentode used as an intermediate-frequency amplifier in television receivers.



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage AC or DC + v + 0 0 0 0 + +	8.4 V	GENERAL
Heater voltage for a bogey tube at If	600 mA	GENERAL
The time required for the voltage across the heater to reach	80 %	GENERAL



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc) 8.4 11.2	16 V	Published in approved 8BQ11 target datasheet entry; Section1
Heater Current 0.6 0.45	315 mA	Published in approved 8BQ11 target datasheet entry; Section1
Heater Warm-up Time (Average) 11 11	11 seconds	Published in approved 8BQ11 target datasheet entry; Section1
Plate of Unit No.1 to Plate of Unit No.2	0.015 pF	Published in approved 8BQ11 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 of Unit No.1 to Plate of Unit No.2	0.002 pF	Published in approved 8BQ11 target datasheet entry; Section1
Grid No.1 of Unit No.2 to Plate of Unit No.1	0.008 pF	Published in approved 8BQ11 target datasheet entry; Section1
Grid No.1 of Unit No.1 to Grid No.1 of Unit No.2	0.002 pF	Published in approved 8BQ11 target datasheet entry; Section1
Grid-No.3 (Suppressor-Grid) Voltage 330	330 V	Published in approved 8BQ11 target datasheet entry; Section1
Grid-No.2 (Screen-Grid) Supply Voltage 0	0 V	Published in approved 8BQ11 target datasheet entry; Section1
Grid-No.2 Voltage 330	330 V	Published in approved 8BQ11 target datasheet entry; Section1
Plate Dissipation 0	0 V	Published in approved 8BQ11 target datasheet entry; Section1
Grid-No.2 Input: 3.1	3.1 W	Published in approved 8BQ11 target datasheet entry; Section1
For grid-No. 2 voltages up to	165 V	Published in approved 8BQ11 target datasheet entry; Section1
For grid-No. 2 voltages up to 165 volts 0.65	0.65 W	Published in approved 8BQ11 target datasheet entry; Section1
For grid-No.2 voltages between 165 and	330 V	Published in approved 8BQ11 target datasheet entry; Section1
Plate Supply Voltage 125	125 V	Published in approved 8BQ11 target datasheet entry; Section1
operation 1	0.25 MΩ	Published in approved 8BQ11 target datasheet entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.3 of Unit No.1, and Internal Shield . 2	8 pF	Published in approved 8BQ11 target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.2 Voltage 125	125 V	Published in approved 8BQ11 target datasheet entry; Section1
Cathode-Bias Resistor 66	66 Ω	Published in approved 8BQ11 target datasheet entry; Section1
Plate Resistance (Approx.) 0.2	0.2 MΩ	Published in approved 8BQ11 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance 10500	13000 μS	Published in approved 8BQ11 target datasheet entry; Section1
Plate Current 11	11 mA	Published in approved 8BQ11 target datasheet entry; Section1
Grid-No.2 Current 3.6	3.8 mA	Published in approved 8BQ11 target datasheet entry; Section1
–	-3 V	Published in approved 8BQ11 target datasheet entry; Section1

1975 RCA RC30

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc) 8.4 11.2	16 V	Published in approved 8BQ11 target datasheet entry; Section2
Heater Current 0.6 0.45	315 mA	Published in approved 8BQ11 target datasheet entry; Section2
Heater Warm-up Time (Average) 11 11	11 seconds	Published in approved 8BQ11 target datasheet entry; Section2
Plate of Unit No.1 to Plate of Unit No.2	0.015 pF	Published in approved 8BQ11 target datasheet entry; Section2
Grid No.1 of Unit No.1 to Plate of Unit No.2	0.002 pF	Published in approved 8BQ11 target datasheet entry; Section2
Grid No.1 of Unit No.2 to Plate of Unit No.1	0.008 pF	Published in approved 8BQ11 target datasheet entry; Section2
Grid No.1 of Unit No.1 to Grid No.1 of Unit No.2	0.002 pF	Published in approved 8BQ11 target datasheet entry; Section2
Grid-No.3 (Suppressor-Grid) Voltage 330	330 V	Published in approved 8BQ11 target datasheet entry; Section2
Grid-No.2 (Screen-Grid) Supply Voltage 0	0 V	Published in approved 8BQ11 target datasheet entry; Section2
Grid-No.2 Voltage 330	330 V	Published in approved 8BQ11 target datasheet entry; Section2
Plate Dissipation 0	0 V	Published in approved 8BQ11 target datasheet entry; Section2
Grid-No.2 Input: 3.1	3.1 W	Published in approved 8BQ11 target datasheet entry; Section2
For grid-No. 2 voltages up to	165 V	Published in approved 8BQ11 target datasheet entry; Section2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
For grid-No. 2 voltages up to 165 volts 0.65	0.65 W	Published in approved 8BQ11 target datasheet entry; Section2
For grid-No.2 voltages between 165 and	330 V	Published in approved 8BQ11 target datasheet entry; Section2
Plate Supply Voltage 125	125 V	Published in approved 8BQ11 target datasheet entry; Section2
operation 1	0.25 MΩ	Published in approved 8BQ11 target datasheet entry; Section2

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.3 of Unit No.1, and Internal Shield . 2	8 pF	Published in approved 8BQ11 target datasheet entry; Section2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.2 Voltage 125	125 V	Published in approved 8BQ11 target datasheet entry; Section2
Cathode-Bias Resistor 66	66 Ω	Published in approved 8BQ11 target datasheet entry; Section2
Plate Resistance (Approx.) 0.2	0.2 MΩ	Published in approved 8BQ11 target datasheet entry; Section2
Transconductance 10500	13000 μS	Published in approved 8BQ11 target datasheet entry; Section2
Plate Current 11	11 mA	Published in approved 8BQ11 target datasheet entry; Section2
Grid-No.2 Current 3.6	3.8 mA	Published in approved 8BQ11 target datasheet entry; Section2
–	-3 V	Published in approved 8BQ11 target datasheet entry; Section2

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker