

ELECTRONIC TUBE REFERENCE

6CX8

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA  
2 SECTIONS  
CONSTRUCTION  
PENTODE-TRIODE

Triode/pentode combination for television video, sound-IF, sweep-oscillator, and synchronization signal-processing circuits.

GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | 9DX               | BASE PINS            | 9             |
| NOMINAL HEATER      | 6.3 V / 750 mA    | PARALLEL HEATER      | – / –         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Dissimilar    |

9DX - TERMINAL PINOUT

| TERMINAL   | SECTION | ELEMENT              | STATUS    |
|------------|---------|----------------------|-----------|
| PIN1 – 2K  | B       | K – Cathode          | CONNECTED |
| PIN2 – 2G1 | B       | G1 – Control Grid    | CONNECTED |
| PIN3 – 2P  | B       | P – Plate (Anode)    | CONNECTED |
| PIN4 – H   | –       | H – Heater           | CONNECTED |
| PIN5 – H   | –       | H – Heater           | CONNECTED |
| PIN6 – 1G3 | A       | G3 – Suppressor Grid | CONNECTED |
| PIN6 – IS  | A       | IS – Internal Screen | CONNECTED |
| PIN6 – 1K  | A       | K – Cathode          | CONNECTED |
| PIN7 – 1G1 | A       | G1 – Control Grid    | CONNECTED |
| PIN8 – 1G2 | A       | G2 – Screen Grid     | CONNECTED |
| PIN9 – 1P  | A       | P – Plate (Anode)    | CONNECTED |

SECTION RATINGS

| SECTION1 Pentode                                                  |                |
|-------------------------------------------------------------------|----------------|
| PLATE RESISTANCE                                                  | 70000 $\Omega$ |
| TRANSCONDUCTANCE                                                  | 0.01 S         |
| AMPLIFICATION FACTOR                                              | 40             |
| MAXIMUM PLATE VOLTAGE                                             | 330 V          |
| MAXIMUM SCREEN VOLTAGE                                            | 330 V          |
| MAXIMUM PLATE DISSIPATION                                         | 5 W            |
| MAXIMUM SCREEN DISSIPATION                                        | 1.1 W          |
| <i>Published promoted fields populated from printed headings.</i> |                |

| SECTION2 Triode                                                   |               |
|-------------------------------------------------------------------|---------------|
| PLATE RESISTANCE                                                  | 8700 $\Omega$ |
| TRANSCONDUCTANCE                                                  | 0.0046 S      |
| AMPLIFICATION FACTOR                                              | 40            |
| MAXIMUM PLATE VOLTAGE                                             | 330 V         |
| MAXIMUM PLATE DISSIPATION                                         | 2 W           |
| <i>Published promoted fields populated from printed headings.</i> |               |

Medium-mu triode plus sharp-cutoff pentode for television video amplification and sound-IF, sweep-oscillator, sync-separator/amplifier/clipper service.



## SOURCE OPERATING CONDITIONS

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# 1961 Tung Sol

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

## 1961 TUNG SOL

## Section 1 · Pentode

| CHARACTERISTIC          |                 |                  |
|-------------------------|-----------------|------------------|
| PARAMETER               | PUBLISHED VALUE | CONDITION / NOTE |
| PentodeTransconductance | 10000 $\mu$ S   | Section1         |

## 1961 TUNG SOL

## Section 2 · Triode

| CHARACTERISTIC         |                 |                  |
|------------------------|-----------------|------------------|
| PARAMETER              | PUBLISHED VALUE | CONDITION / NOTE |
| TriodeTransconductance | 4600 $\mu$ S    | Section2         |



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# 1966 Tung Sol Electronic Tubes 2 of 4

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

## 1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

## Section 1 · Pentode

| OTHER          |                 |                  |
|----------------|-----------------|------------------|
| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE |
| Plate voltage  | 200 V           | ClassA           |
| Screen voltage | 125 V           | ClassA           |

| CHARACTERISTIC |                 |                  |
|----------------|-----------------|------------------|
| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE |
| Plate current  | 24 mA           | ClassA           |
|                |                 |                  |

| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE |
|----------------|-----------------|------------------|
| Screen current | 5.2 mA          | ClassA           |

| CAPACITANCE                 |                 |                  |
|-----------------------------|-----------------|------------------|
| PARAMETER                   | PUBLISHED VALUE | CONDITION / NOTE |
| Grid-1-to-plate capacitance | 0.06 pF         | —                |
| Input capacitance           | 9 pF            | —                |
| Output capacitance          | 4.4 pF          | —                |

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

## Section 2 · Triode

| OTHER                 |                 |                  |
|-----------------------|-----------------|------------------|
| PARAMETER             | PUBLISHED VALUE | CONDITION / NOTE |
| Plate voltage         | 150 V           | ClassA           |
| Cathode-bias resistor | 150 ohm         | ClassA           |

| CHARACTERISTIC |                 |                  |
|----------------|-----------------|------------------|
| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE |
| Plate current  | 9.2 mA          | ClassA           |

| CAPACITANCE               |                 |                  |
|---------------------------|-----------------|------------------|
| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE |
| Grid-to-plate capacitance | 0.4 pF          | —                |
| Input capacitance         | 2.2 pF          | —                |
| Output capacitance        | 0.38 pF         | —                |



**TUBE TINKER**  
ELECTRON TUBE DATABASE

SOURCE DATA APPENDIX

### SOURCE OPERATING CONDITIONS

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# 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 |
| HeaterVoltageNominal   | 6.3 V           | —                |
| HeaterCurrentNominal   | 750 mA          | —                |
| Typical Plate Voltage  | 200 V           | ClassA           |
| Typical Screen Voltage | 125 V           | ClassA           |

| CHARACTERISTIC   |                 |                  |
|------------------|-----------------|------------------|
| PARAMETER        | PUBLISHED VALUE | CONDITION / NOTE |
| Plate Resistance | 70000 Ohm       | —                |
| Transconductance | 10000 uS        | —                |

1968 GENERAL ELECTRIC CO

Section 2 · Triode

| CHARACTERISTIC       |                 |                  |
|----------------------|-----------------|------------------|
| PARAMETER            | PUBLISHED VALUE | CONDITION / NOTE |
| Plate Resistance     | 8700 Ohm        | —                |
| Transconductance     | 4600 uS         | —                |
| Amplification Factor | 40              | —                |

| OTHER                 |                 |                  |
|-----------------------|-----------------|------------------|
| PARAMETER             | PUBLISHED VALUE | CONDITION / NOTE |
| Typical Plate Voltage | 150 V           | ClassA           |



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1971 RCA HB3 Binder 4 of 7

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

## Section 1 · Pentode

| OTHER                             |                 |                                                                                                  |
|-----------------------------------|-----------------|--------------------------------------------------------------------------------------------------|
| PARAMETER                         | PUBLISHED VALUE | CONDITION / NOTE                                                                                 |
| Triode grid to pentode plate      | <b>0.018 mA</b> | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Pentode grid No.1 to triode plate | <b>0.005 mA</b> | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Pentode plate to triode plate     | <b>0.17 mA</b>  | Published datasheet value; multiple values represent separate source-table limits or conditions. |

| CHARACTERISTICS                   |                 |                                                                                                  |
|-----------------------------------|-----------------|--------------------------------------------------------------------------------------------------|
| PARAMETER                         | PUBLISHED VALUE | CONDITION / NOTE                                                                                 |
| Plate                             | <b>7</b>        | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Pin 5 -Heater – published value 1 | <b>5</b>        | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Pin 5 -Heater – published value 2 | <b>8</b>        | Published datasheet value; multiple values represent separate source-table limits or conditions. |

1971 RCA HB3 BINDER 4 OF 7

## Section 2 · Triode

| CHARACTERISTICS                        |                 |                                                                                                  |
|----------------------------------------|-----------------|--------------------------------------------------------------------------------------------------|
| PARAMETER                              | PUBLISHED VALUE | CONDITION / NOTE                                                                                 |
| Voltage (AC or DC) – published value 1 | <b>6.3 V</b>    | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Voltage (AC or DC) – published value 2 | <b>10 V</b>     | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Current                                | <b>750 mA</b>   | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Grid to plate                          | <b>4.4</b>      | Published datasheet value; multiple values represent separate source-table limits or conditions. |
|                                        |                 |                                                                                                  |

| PARAMETER                                    | PUBLISHED VALUE | CONDITION / NOTE                                                                                 |
|----------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------|
| Grid to cathode and heater                   | <b>2.2</b>      | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Plate to cathode and heater                  | <b>0.38</b>     | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Grid No.1 to plate                           | <b>0.06</b>     | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Grid No.1 to cathode 6                       | <b>6</b>        | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| No.3, grid No.2, and heater                  | <b>9</b>        | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| shield 8 grid No.3, grid                     | <b>8</b>        | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| No.2, and heater                             | <b>4.4</b>      | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Plate Supply Voltage – published value 1     | <b>150 V</b>    | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Plate Supply Voltage – published value 2     | <b>40 V</b>     | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Plate Supply Voltage – published value 3     | <b>200 V</b>    | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Grid-No.2 Supply Voltage – published value 1 | <b>125 V</b>    | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Grid-No.2 Supply Voltage – published value 2 | <b>125 V</b>    | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Grid-No.1 Voltage                            | <b>0 V</b>      | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Cathode Resistor – published value 1         | <b>150 ohm</b>  | Published datasheet value; multiple values represent separate source-table limits or conditions. |
|                                              |                 |                                                                                                  |

| PARAMETER                                      | PUBLISHED VALUE  | CONDITION / NOTE                                                                                 |
|------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------|
| Cathode Resistor – published value 2           | <b>68 ohm</b>    | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Plate Resistance (Approx.) – published value 1 | <b>8700 ohm</b>  | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Plate Resistance (Approx.) – published value 2 | <b>70000 ohm</b> | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Transconductance – published value 1           | <b>4600</b>      | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Transconductance – published value 2           | <b>10000</b>     | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Plate Current – published value 1              | <b>9.2 mA</b>    | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Plate Current – published value 2              | <b>40 mA</b>     | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Plate Current – published value 3              | <b>24 mA</b>     | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Grid-No.2 Current – published value 1          | <b>15.5 mA</b>   | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Grid-No.2 Current – published value 2          | <b>5.2 mA</b>    | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| for plate $\mu_a = 100$ – published value 1    | <b>100 V</b>     | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| for plate $\mu_a = 100$ – published value 2    | <b>-5 V</b>      | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| for plate $\mu_a = 100$ – published value 3    | <b>-8.5 V</b>    | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Pin 2 -Triode                                  | <b>2</b>         | Published datasheet value; multiple values represent separate source-table limits or conditions. |
|                                                |                  |                                                                                                  |

| PARAMETER     | PUBLISHED VALUE | CONDITION / NOTE                                                                                 |
|---------------|-----------------|--------------------------------------------------------------------------------------------------|
| Pin 4 -Heater | 4               | Published datasheet value; multiple values represent separate source-table limits or conditions. |

| OTHER                                        |                 |                                                                                                  |
|----------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------|
| PARAMETER                                    | PUBLISHED VALUE | CONDITION / NOTE                                                                                 |
| PLATE VOLTAGE – published value 1            | 330 V           | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| PLATE VOLTAGE – published value 2            | 330 V           | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Positive-bias value – published value 1      | 0 V             | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| Positive-bias value – published value 2      | 0 V             | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| PLATE DISSIPATION – published value 1        | 2 mA            | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| PLATE DISSIPATION – published value 2        | 5 mA            | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| respect to cathode – published value 1       | 200 V           | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| respect to cathode – published value 2       | 200 V           | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| respect to cathode – published value 1       | 200 V           | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| respect to cathode – published value 2       | 200 V           | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| For fixed-bias operation – published value 1 | 0.5 mA          | Published datasheet value; multiple values represent separate source-table limits or conditions. |
| For fixed-bias operation – published value 2 | 0.25 mA         | Published datasheet value; multiple values represent separate source-table limits or conditions. |

## 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 · Pentode

| OTHER                                                   |                 |                                                             |
|---------------------------------------------------------|-----------------|-------------------------------------------------------------|
| PARAMETER                                               | PUBLISHED VALUE | CONDITION / NOTE                                            |
| Heater Voltage (ac/dc) 6.3                              | 8 V             | Published in approved 8CX8 target datasheet entry; Section2 |
| Heater Current 0.75                                     | 600 mA          | Published in approved 8CX8 target datasheet entry; Section2 |
| Heater Warm-up Time (Average)                           | 11 V            | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate Voltage 330                                       | 330 V           | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid-No.2 (Screen-Grid) Voltage                         | 330 V           | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid-No.1 (Control-Grid) Voltage, Positive-bias value 0 | 0 V             | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate Dissipation 2                                     | 5 W             | Published in approved 8CX8 target datasheet entry; Section2 |
| For grid-No.2 voltages up to                            | 165 V           | Published in approved 8CX8 target datasheet entry; Section2 |
| For grid-No. voltages between 165 and                   | 330 V           | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate Supply Voltage 150                                | 200 V           | Published in approved 8CX8 target datasheet entry; Section2 |
| For fixed-bias operation 0.5                            | 0.25 MΩ         | Published in approved 8CX8 target datasheet entry; Section2 |
| For cathode-bias operation 1                            | 1 MΩ            | Published in approved 8CX8 target datasheet entry; Section2 |
| Heater Voltage (ac/dc) 2.4 2.9                          | 6.3 V           | Published in approved 8CX8 target datasheet entry; Section2 |
| Heater Current 0.6 0.45                                 | 200 mA          | Published in approved 8CX8 target datasheet entry; Section2 |

| PARAMETER                                                | PUBLISHED VALUE   | CONDITION / NOTE                                            |
|----------------------------------------------------------|-------------------|-------------------------------------------------------------|
| Heater Warm-up Time<br>(Average) 11                      | <b>11 seconds</b> | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate Voltage                                            | <b>180 V</b>      | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid-No.2 (Screen-Grid)<br>Supply Voltage                | <b>180 V</b>      | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid-No.1 (Control-Grid)<br>Voltage, Positive-bias value | <b>0 V</b>        | Published in approved 8CX8 target datasheet entry; Section2 |
| Cathode Current                                          | <b>20 mA</b>      | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate Dissipation                                        | <b>2 W</b>        | Published in approved 8CX8 target datasheet entry; Section2 |
| For grid-No.2 voltages up to                             | <b>90 V</b>       | Published in approved 8CX8 target datasheet entry; Section2 |
| For grid-No.2 voltages up to<br>90 volts                 | <b>0.5 W</b>      | Published in approved 8CX8 target datasheet entry; Section2 |
| For grid-No.2 voltages<br>between 90 and                 | <b>180 V</b>      | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate Voltage                                            | <b>125 V</b>      | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid-No.1-Circuit Resistance                             | <b>0.6 MΩ</b>     | Published in approved 8CX8 target datasheet entry; Section2 |

| CAPACITANCE                 |                 |                                                             |
|-----------------------------|-----------------|-------------------------------------------------------------|
| PARAMETER                   | PUBLISHED VALUE | CONDITION / NOTE                                            |
| Grid to Plate               | <b>4.4 pF</b>   | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid to Cathode and Heater  | <b>2.2 pF</b>   | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate to Cathode and Heater | <b>0.38 pF</b>  | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid No.1 to Plate          | <b>0.06 pF</b>  | Published in approved 8CX8 target datasheet entry; Section2 |
| Internal Shield             | <b>9 pF</b>     | Published in approved 8CX8 target datasheet entry; Section2 |
| Internal Shield             | <b>4.4 pF</b>   | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid-No.1 to Plate          | <b>0.03 pF</b>  | Published in approved 8CX8 target datasheet entry; Section2 |
|                             |                 |                                                             |

| PARAMETER                                                   | PUBLISHED VALUE | CONDITION / NOTE                                            |
|-------------------------------------------------------------|-----------------|-------------------------------------------------------------|
| Grid-No.1 to Cathode, Heater, Grid No.2 and Internal Shield | <b>4.5 pF</b>   | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate to Cathode, Heater, Grid No.2, and Internal Shield    | <b>3 pF</b>     | Published in approved 8CX8 target datasheet entry; Section2 |

| CHARACTERISTIC                                          |                                  |                                                             |
|---------------------------------------------------------|----------------------------------|-------------------------------------------------------------|
| PARAMETER                                               | PUBLISHED VALUE                  | CONDITION / NOTE                                            |
| Grid-No.2 Supply Voltage                                | <b>125 V</b>                     | Published in approved 8CX8 target datasheet entry; Section2 |
| Cathode-Bias Resistor 150                               | <b>68 <math>\Omega</math></b>    | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate Resistance (Approx.) 8700                         | <b>70000 <math>\Omega</math></b> | Published in approved 8CX8 target datasheet entry; Section2 |
| Transconductance 4600                                   | <b>10000 <math>\mu</math>S</b>   | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate Current 9.2                                       | <b>24 mA</b>                     | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid-No.2 Current                                       | <b>5.2 mA</b>                    | Published in approved 8CX8 target datasheet entry; Section2 |
| 100 /1A -5                                              | <b>-8.5 V</b>                    | Published in approved 8CX8 target datasheet entry; Section2 |
| Transconductance                                        | <b>8000 <math>\mu</math>S</b>    | Published in approved 8CX8 target datasheet entry; Section2 |
| Plate Current                                           | <b>10 mA</b>                     | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid-No.2 Current                                       | <b>1.5 mA</b>                    | Published in approved 8CX8 target datasheet entry; Section2 |
| Grid-No.1 Voltage (Approx.) for plate current of 20 /1A | <b>-6 V</b>                      | Published in approved 8CX8 target datasheet entry; Section2 |

1975 RCA RC30

## Section 2 · Triode

| OTHER                      |                 |                                                             |
|----------------------------|-----------------|-------------------------------------------------------------|
| PARAMETER                  | PUBLISHED VALUE | CONDITION / NOTE                                            |
| Heater Voltage (ac/dc) 6.3 | <b>8 V</b>      | Published in approved 8CX8 target datasheet entry; Section1 |
| Heater Current 0.75        | <b>600 mA</b>   | Published in approved 8CX8 target datasheet entry; Section1 |
|                            |                 |                                                             |

| PARAMETER                                               | PUBLISHED VALUE   | CONDITION / NOTE                                            |
|---------------------------------------------------------|-------------------|-------------------------------------------------------------|
| Heater Warm-up Time (Average)                           | <b>11 V</b>       | Published in approved 8CX8 target datasheet entry; Section1 |
| Plate Voltage 330                                       | <b>330 V</b>      | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid-No.2 (Screen-Grid) Voltage                         | <b>330 V</b>      | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid-No.1 (Control-Grid) Voltage, Positive-bias value 0 | <b>0 V</b>        | Published in approved 8CX8 target datasheet entry; Section1 |
| Plate Dissipation 2                                     | <b>5 W</b>        | Published in approved 8CX8 target datasheet entry; Section1 |
| For grid-No.2 voltages up to                            | <b>165 V</b>      | Published in approved 8CX8 target datasheet entry; Section1 |
| For grid-No. voltages between 165 and                   | <b>330 V</b>      | Published in approved 8CX8 target datasheet entry; Section1 |
| Plate Supply Voltage 150                                | <b>200 V</b>      | Published in approved 8CX8 target datasheet entry; Section1 |
| For fixed-bias operation 0.5                            | <b>0.25 MΩ</b>    | Published in approved 8CX8 target datasheet entry; Section1 |
| For cathode-bias operation 1                            | <b>1 MΩ</b>       | Published in approved 8CX8 target datasheet entry; Section1 |
| Heater Voltage (ac/dc) 2.4 2.9                          | <b>6.3 V</b>      | Published in approved 8CX8 target datasheet entry; Section1 |
| Heater Current 0.6 0.45                                 | <b>200 mA</b>     | Published in approved 8CX8 target datasheet entry; Section1 |
| Heater Warm-up Time (Average) 11                        | <b>11 seconds</b> | Published in approved 8CX8 target datasheet entry; Section1 |
| Plate Voltage                                           | <b>180 V</b>      | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid-No.2 (Screen-Grid) Supply Voltage                  | <b>180 V</b>      | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid-No.1 (Control-Grid) Voltage, Positive-bias value   | <b>0 V</b>        | Published in approved 8CX8 target datasheet entry; Section1 |
| Cathode Current                                         | <b>20 mA</b>      | Published in approved 8CX8 target datasheet entry; Section1 |
| Plate Dissipation                                       | <b>2 W</b>        | Published in approved 8CX8 target datasheet entry; Section1 |
| For grid-No.2 voltages up to                            | <b>90 V</b>       | Published in approved 8CX8 target datasheet entry; Section1 |
|                                                         |                   |                                                             |

| PARAMETER                             | PUBLISHED VALUE | CONDITION / NOTE                                            |
|---------------------------------------|-----------------|-------------------------------------------------------------|
| For grid-No.2 voltages up to 90 volts | <b>0.5 W</b>    | Published in approved 8CX8 target datasheet entry; Section1 |
| For grid-No.2 voltages between 90 and | <b>180 V</b>    | Published in approved 8CX8 target datasheet entry; Section1 |
| Plate Voltage                         | <b>125 V</b>    | Published in approved 8CX8 target datasheet entry; Section1 |

| CAPACITANCE                                                 |                 |                                                             |
|-------------------------------------------------------------|-----------------|-------------------------------------------------------------|
| PARAMETER                                                   | PUBLISHED VALUE | CONDITION / NOTE                                            |
| Grid to Plate                                               | <b>4.4 pF</b>   | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid to Cathode and Heater                                  | <b>2.2 pF</b>   | Published in approved 8CX8 target datasheet entry; Section1 |
| Plate to Cathode and Heater                                 | <b>0.38 pF</b>  | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid No.1 to Plate                                          | <b>0.06 pF</b>  | Published in approved 8CX8 target datasheet entry; Section1 |
| Internal Shield                                             | <b>9 pF</b>     | Published in approved 8CX8 target datasheet entry; Section1 |
| Internal Shield                                             | <b>4.4 pF</b>   | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid-No.1 to Plate                                          | <b>0.03 pF</b>  | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid-No.1 to Cathode, Heater, Grid No.2 and Internal Shield | <b>4.5 pF</b>   | Published in approved 8CX8 target datasheet entry; Section1 |
| Plate to Cathode, Heater, Grid No.2, and Internal Shield    | <b>3 pF</b>     | Published in approved 8CX8 target datasheet entry; Section1 |

| CHARACTERISTIC                  |                                  |                                                             |
|---------------------------------|----------------------------------|-------------------------------------------------------------|
| PARAMETER                       | PUBLISHED VALUE                  | CONDITION / NOTE                                            |
| Grid-No.2 Supply Voltage        | <b>125 V</b>                     | Published in approved 8CX8 target datasheet entry; Section1 |
| Cathode-Bias Resistor 150       | <b>68 <math>\Omega</math></b>    | Published in approved 8CX8 target datasheet entry; Section1 |
| Plate Resistance (Approx.) 8700 | <b>70000 <math>\Omega</math></b> | Published in approved 8CX8 target datasheet entry; Section1 |
| Transconductance 4600           | <b>10000 <math>\mu S</math></b>  | Published in approved 8CX8 target datasheet entry; Section1 |
|                                 |                                  |                                                             |

| PARAMETER                                                  | PUBLISHED VALUE               | CONDITION / NOTE                                            |
|------------------------------------------------------------|-------------------------------|-------------------------------------------------------------|
| Plate Current 9.2                                          | <b>24 mA</b>                  | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid-No.2 Current                                          | <b>5.2 mA</b>                 | Published in approved 8CX8 target datasheet entry; Section1 |
| 100 /1A -5                                                 | <b>-8.5 V</b>                 | Published in approved 8CX8 target datasheet entry; Section1 |
| Transconductance                                           | <b>8000 <math>\mu</math>S</b> | Published in approved 8CX8 target datasheet entry; Section1 |
| Plate Current                                              | <b>10 mA</b>                  | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid-No.2 Current                                          | <b>1.5 mA</b>                 | Published in approved 8CX8 target datasheet entry; Section1 |
| Grid-No.1 Voltage (Approx.)<br>for plate current of 20 /1A | <b>-6 V</b>                   | Published in approved 8CX8 target datasheet entry; Section1 |

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