

ELECTRONIC TUBE REFERENCE

75C1

Voltage Regulator electronic tube

CONSOLIDATED TECHNICAL DATA  
1 SECTION  
CONSTRUCTION  
VOLTAGEREGULATOR

Cold-cathode stabilizer/reference tube operating near 78 V over a broad specified current range.

GENERAL CHARACTERISTICS

|                     |                        |                      |               |
|---------------------|------------------------|----------------------|---------------|
| BASE DESIGNATION    | —                      | BASE PINS            | 7             |
| NOMINAL HEATER      | — / —                  | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect; cold cathode | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes      | SECTION CONSTRUCTION | Similar       |

SECTION RATINGS

|                            |       |
|----------------------------|-------|
| SECTION1 Voltage Regulator |       |
| REGULATOR VOLTAGE          | 78 V  |
| MINIMUM REGULATOR CURRENT  | 2 mA  |
| MAXIMUM REGULATOR CURRENT  | 64 mA |
| STARTING VOLTAGE           | 115 V |
| MAINTAINING VOLTAGE        | 78 V  |
| DYNAMIC IMPEDANCE          | 130 Ω |
| Gas-discharge device.      |       |

The Philips 75C1 is a cold-cathode voltage stabilising or reference tube operating near 78 V.

## SOURCE OPERATING CONDITIONS

# 1953 RFT Rundfunk Technik

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

## 1953 RFT RUNDFUNK TECHNIK

## Section 1 · Voltage Regulator

| CHARACTERISTIC                       |                 |                  |
|--------------------------------------|-----------------|------------------|
| PARAMETER                            | PUBLISHED VALUE | CONDITION / NOTE |
| Nominal maintaining voltage          | 78 V            | —                |
| Voltage variation over current range | 6 V             | —                |

| OTHER                    |                 |                                       |
|--------------------------|-----------------|---------------------------------------|
| PARAMETER                | PUBLISHED VALUE | CONDITION / NOTE                      |
| Current range            | 2 to 60 mA      | —                                     |
| Nominal current          | 30 mA           | —                                     |
| Radioactive starting aid | present         | No harmful radiation stated by source |

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1957 Philips Receiving and Amplifying Tubes

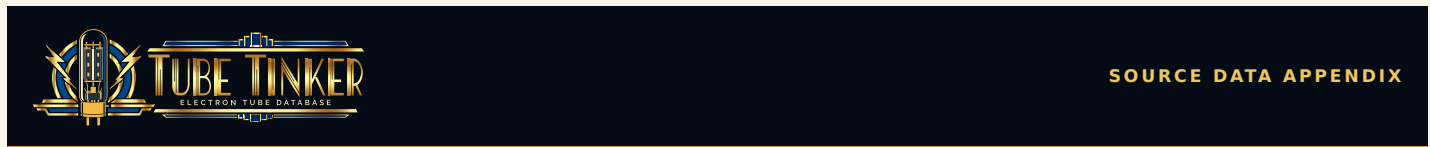
Published test conditions and operating points. Values on this page are preserved as reported by this source.

## 1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

## Section 1 · Voltage Regulator

| CHARACTERISTICS               |                 |                  |
|-------------------------------|-----------------|------------------|
| PARAMETER                     | PUBLISHED VALUE | CONDITION / NOTE |
| Maintaining/Reference Voltage | 78 V            | —                |

| OTHER           |                 |                  |
|-----------------|-----------------|------------------|
| PARAMETER       | PUBLISHED VALUE | CONDITION / NOTE |
| Minimum Current | 2 mA            | —                |
| Maximum Current | 60 mA           | —                |



#### SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1963 Philips Electron Tubes Handbook V2

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V2

## Section 1 · Voltage Regulator

| CHARACTERISTIC               |                 |                  |
|------------------------------|-----------------|------------------|
| PARAMETER                    | PUBLISHED VALUE | CONDITION / NOTE |
| Maintaining voltage at 30 mA | 75–81 V         | —                |
| Voltage regulation           | 5–8 V           | Ia=2-60mA        |



#### SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1971 Mullard Gas Filled Tubes

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

1971 MULLARD GAS FILLED TUBES

## Section 1 · Voltage Regulator

| CHARACTERISTIC         |                 |                  |
|------------------------|-----------------|------------------|
| PARAMETER              | PUBLISHED VALUE | CONDITION / NOTE |
| Maintaining voltage    | 78 V            | —                |
| Incremental resistance | 130 ohm         | —                |
| Regulation voltage     | 5 V             | —                |

| OTHER                     |                 |                  |
|---------------------------|-----------------|------------------|
| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE |
| Ignition/striking voltage | 115 V           | —                |
| Minimum cathode current   | 2 mA            | —                |
| Maximum cathode current   | 64 mA           | —                |



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1999 Philips 0-D

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

1999 PHILIPS 0-D

## Section 1 · Voltage Regulator

| CHARACTERISTICS                |                 |                                                                       |
|--------------------------------|-----------------|-----------------------------------------------------------------------|
| PARAMETER                      | PUBLISHED VALUE | CONDITION / NOTE                                                      |
| Maintaining voltage minimum    | 75 V            | Ia30mA                                                                |
| Maintaining voltage maximum    | 81 V            | Ia30mA                                                                |
| Regulation maximum             | 8 V             | Ia2to60mA                                                             |
| Incremental resistance maximum | 200 Ohm         | —                                                                     |
| Regulation (I                  | -60 mA          | PublishedLine: Régulation (I = 2-60 mA)                               |
| Iaz) max                       | 7 mA            | PublishedLine: Iaz) = max, 7 mA                                       |
| Pour des courants              | 10 mA           | PublishedLine: Pour des courants <10 mA on peut expecter des sauts de |
| werden bei Strtme              | 10 mA           | PublishedLine: werden bei Strtme <10 mA                               |
| Va (Ia                         | 30 ma           | PublishedLine: Va (Ia = 30 ma) = 75-81 V                              |
| Regulation (Ia                 | -60 mA          | PublishedLine: Régulation (Ia = 2-60 mA) - m g 3                      |
| Pour des courants              | 10 mA           | PublishedLine: Pour des courants <10 mA on peut expecter des sauts de |
| werden bei Strime              | 10 mA           | PublishedLine: werden bei Strime <10 mA                               |

| OTHER                 |                 |                  |
|-----------------------|-----------------|------------------|
| PARAMETER             | PUBLISHED VALUE | CONDITION / NOTE |
| Anode current minimum | 2 mA            | —                |

| PARAMETER                  | PUBLISHED VALUE | CONDITION / NOTE                                       |
|----------------------------|-----------------|--------------------------------------------------------|
| Anode current maximum      | 60 mA           | —                                                      |
| Starting current maximum   | 100 mA          | —                                                      |
| Starting voltage maximum   | 115 V           | —                                                      |
| I min                      | 2 mA            | PublishedLine: I = min, 2,0 mA                         |
| a max                      | 60 mA           | PublishedLine: a = max. 60 mA                          |
| Intensit au d marriage max | 100 ma          | PublishedLine: Intensité au démarrage = max. 100 ma °) |
| Ia max.                    | 0 mA            | PublishedLine: Ia {: max. &0 mA                        |
| Intensit au d marriage max | 100 mA          | PublishedLine: Intensité au démarrage max, 100 mA 3)   |