



## ELECTRONIC TUBE REFERENCE

## DY802

Rectifier - TV Line Scan Boost electronic tube

CONSOLIDATED TECHNICAL DATA

## 1 SECTION

CONSTRUCTION

## RECTIFIER

High-voltage half-wave rectifier specifically for television flyback/EHT supplies, converting horizontal-output transformer pulses into CRT accelerating voltage with a filament designed to operate at elevated potential.

## GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | NOVAL             | BASE PINS            | 9             |
| NOMINAL HEATER      | 1.4 V / 600 mA    | PARALLEL HEATER      | – / –         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

## SECTION RATINGS

|                                                                                                        |         |
|--------------------------------------------------------------------------------------------------------|---------|
| SECTION 1 Rectifier                                                                                    |         |
| PEAK INVERSE VOLTAGE                                                                                   | 30000 V |
| NOMINAL OUTPUT CURRENT                                                                                 | 0.5 mA  |
| PEAK FORWARD CURRENT                                                                                   | 50 mA   |
| Source-published values promoted where directly stated; additional values retained in parameter table. |         |

High-voltage rectifier diode for approximately 20 kV EHT supplies in 110-degree monochrome television receivers.



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1959 Telefunken

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

1959 TELEFUNKEN

## Section 1 · Rectifier

| OTHER                |                 |                  |
|----------------------|-----------------|------------------|
| PARAMETER            | PUBLISHED VALUE | CONDITION / NOTE |
| Peak Inverse Voltage | 25000 V         | FlybackPulse     |
| DC Output Current    | 0.8 mA          | —                |
| Peak Current         | 50 mA           | FlybackPulse     |



## SOURCE OPERATING CONDITIONS

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# 1968 Mazda Belvu

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

1968 MAZDA BELVU

## Section 1 · Rectifier

| APPLICATION |                             |                  |
|-------------|-----------------------------|------------------|
| PARAMETER   | PUBLISHED VALUE             | CONDITION / NOTE |
| Application | TelevisionEHTRectifier text | —                |



## SOURCE OPERATING CONDITIONS

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# 1972 Philips Receiving Tubes

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

1972 PHILIPS RECEIVING TUBES

## Section 1 · Rectifier

| OTHER                           |                 |                  |
|---------------------------------|-----------------|------------------|
| PARAMETER                       | PUBLISHED VALUE | CONDITION / NOTE |
| Heater current Ig               | 600 mA          | —                |
| current of                      | 200 uA          | —                |
| Output voltage Vo max           | —20 kV          | Maximum          |
| Peak inverse voltage Vainvp max | —25 kv          | Maximum          |
| peak Iop max                    | —50 mA          | Maximum          |

| CAPACITANCE                                        |                 |                  |
|----------------------------------------------------|-----------------|------------------|
| PARAMETER                                          | PUBLISHED VALUE | CONDITION / NOTE |
| Anode to all Ca                                    | 1 pF            | —                |
| 2) During short periods as in TV operation I = max | —800 uA         | Maximum          |

| CHARACTERISTIC    |                 |                  |
|-------------------|-----------------|------------------|
| PARAMETER         | PUBLISHED VALUE | CONDITION / NOTE |
| Output current I  | 200 uA          | —                |
| Output voltage Vo | 20 kv           | —                |



### SOURCE OPERATING CONDITIONS

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# 1973 Mazda Valves Binder 2

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

### 1973 MAZDA VALVES BINDER 2

## Section 1 · Rectifier

| OTHER                        |                 |                  |
|------------------------------|-----------------|------------------|
| PARAMETER                    | PUBLISHED VALUE | CONDITION / NOTE |
| HeaterVoltageNominal         | 1.4 V           | Nominal          |
| HeaterCurrentNominal         | 600 mA          | Nominal          |
| Maximum Peak Inverse Voltage | 30000 V         | —                |
| Rectified Output Current     | 0.5 mA          | —                |
|                              |                 |                  |

| PARAMETER                      | PUBLISHED VALUE | CONDITION / NOTE                        |
|--------------------------------|-----------------|-----------------------------------------|
| PeakForwardCurrent             | 50 mA           | —                                       |
| DesignCentrePeakInverseVoltage | 25000 V         | Normal television flyback EHT operation |



SOURCE DATA APPENDIX

## SOURCE OPERATING CONDITIONS

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# 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 · Rectifier

| CAPACITANCE              |                 |                  |
|--------------------------|-----------------|------------------|
| PARAMETER                | PUBLISHED VALUE | CONDITION / NOTE |
| Anode to all capacitance | 1 pF            | —                |

| OTHER                                 |                 |                    |
|---------------------------------------|-----------------|--------------------|
| PARAMETER                             | PUBLISHED VALUE | CONDITION / NOTE   |
| Typical DC output current             | 0.2 mA          | —                  |
| Typical DC output voltage             | 20000 V         | —                  |
| Maximum DC output voltage             | 20000 V         | —                  |
| Maximum peak inverse voltage          | 25000 V         | DesignCentre       |
| Absolute maximum peak inverse voltage | 30000 V         | AbsoluteMaximum    |
| Maximum average output current        | 0.5 mA          | —                  |
| Maximum peak output current           | 50 mA           | PulseRated         |
| Maximum filter input capacitance      | 3000 pF         | —                  |
| Short-period output current           | 0.8 mA          | TelevisionService  |
| Peak-inverse pulse duration maximum   | 18 us           | Duty<=22%LineCycle |

## TUBE TINKER

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

