



ELECTRONIC TUBE REFERENCE

YD1180

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA  
1 SECTION  
CONSTRUCTION  
TRIODE

Forced-air-cooled high-power RF triode for industrial oscillator service.

GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | —             |
| NOMINAL HEATER      | 7 V / 175 A       | PARALLEL HEATER      | — / —         |
| HEATING             | Direct            | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

SECTION RATINGS

|                                                                                        |         |
|----------------------------------------------------------------------------------------|---------|
| SECTION1 Triode                                                                        |         |
| PLATE RESISTANCE                                                                       | 825 Ω   |
| TRANSCONDUCTANCE                                                                       | 0.04 S  |
| AMPLIFICATION FACTOR                                                                   | 33      |
| MAXIMUM PLATE VOLTAGE                                                                  | 9000 V  |
| MAXIMUM PLATE DISSIPATION                                                              | 15000 W |
| MAXIMUM CATHODE CURRENT                                                                | 6 A     |
| High-power RF triode; published principal characteristic and limiting values promoted. |         |

Forced-air-cooled high-power RF triode for industrial oscillator service. Published filament, capacitance, limiting-rating, and representative Class-C industrial oscillator data were extracted from the supplied Philips sheet.

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1999 Philips E-Z

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

1999 PHILIPS E-Z

## Section 1 · Triode

| CHARACTERISTICS      |                 |                  |
|----------------------|-----------------|------------------|
| PARAMETER            | PUBLISHED VALUE | CONDITION / NOTE |
| Filament voltage     | 7 V             | —                |
| Filament current     | 175 A           | —                |
| Transconductance     | 40000 $\mu$ S   | —                |
| Amplification factor | 33              | —                |

| CAPACITANCE                   |                 |                  |
|-------------------------------|-----------------|------------------|
| PARAMETER                     | PUBLISHED VALUE | CONDITION / NOTE |
| Anode to filament capacitance | 1 pF            | —                |
| Grid to filament capacitance  | 66 pF           | —                |
| Anode to grid capacitance     | 32 pF           | —                |

| OTHER                      |                 |                                     |
|----------------------------|-----------------|-------------------------------------|
| PARAMETER                  | PUBLISHED VALUE | CONDITION / NOTE                    |
| Maximum anode voltage      | 9000 V          | —                                   |
| Maximum anode current      | 6 A             | —                                   |
| Maximum anode dissipation  | 15000 W         | —                                   |
| Operating frequency        | 27.12 MHz       | IndustrialClassC                    |
| Operating anode voltage    | 7500 V          | IndustrialClassC;Frequency=27.12MHz |
| Operating anode current    | 5.4 A           | IndustrialClassC;Frequency=27.12MHz |
| Anode output power         | 33000 W         | IndustrialClassC;Frequency=27.12MHz |
| Frequency for full ratings | 100 MHz         | —                                   |

| CONSTRUCTION   |                 |                  |
|----------------|-----------------|------------------|
| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE |
| Cooling system | ForcedAir       | —                |

## 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