

ELECTRONIC TUBE REFERENCE

RD50XL

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

CONSOLIDATED TECHNICAL DATA

1 SECTION  
CONSTRUCTION  
TRIODE

Power transmitting triode intended for RF amplification, oscillation, or related professional service. Manufacturer documentation emphasizes radio-frequency operation, useful power output, and transmitter or industrial applications.

GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | —             |
| NOMINAL HEATER      | 13 V / 260 A      | PARALLEL HEATER      | — / —         |
| HEATING             | Direct            | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

SECTION RATINGS

|                                                                                               |         |
|-----------------------------------------------------------------------------------------------|---------|
| SECTION1 Triode                                                                               |         |
| AMPLIFICATION FACTOR                                                                          | 60      |
| MAXIMUM PLATE VOLTAGE                                                                         | 15000 V |
| MAXIMUM PLATE DISSIPATION                                                                     | 50000 W |
| MAXIMUM GRID DISSIPATION                                                                      | 2000 W  |
| Published characteristic ranges are preserved in parameters when no single scalar is printed. |         |

The TESLA RD50XL tube is a directly Die TESLA-Rohre RD50XL ist eine direkt heated triode of 50 kW anode dissipation, geheizte Triode mit 50 kW Anodenverlust- intended for use as an RF power amplifier leistung, bestimmt zum Einsatz als Hoch- or as an oscillator in SW, TV, and VSW FM frequenz- Kraftverstärker oder Oszillator broadcast transmitters, as well as in com- in Kurzwellen-, Fernseh- und UKW.-Rund- munication transmitters operating at fre- funksendern mit Frequenzmodulation: so- guencies lower than 100 Me/s. wie für Sender des Nachrichtenwesens, die mit niedrigeren Frequenzen als 100 MHz arbeiten.



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 195X Tesla

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

195X TESLA

## Section 1 · Triode

**CHARACTERISTICS**

| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE                              |
|----------------|-----------------|-----------------------------------------------|
| Heater voltage | 13 V            | Nominal or midpoint of published heater range |
| Heater current | 260 A           | Nominal or midpoint of published heater range |

**OTHER**

| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE      |
|---------------------------|-----------------|-----------------------|
| Maximum anode dissipation | 50000 W         | Published tube rating |

**CAPACITANCE**

| PARAMETER                        | PUBLISHED VALUE | CONDITION / NOTE       |
|----------------------------------|-----------------|------------------------|
| Interelectrode capacitance Czi/k | 200 pF          | Published source value |
| Interelectrode capacitance Cajk  | 5 pF            | Published source value |
| Interelectrode capacitance Ca/gl | 70 pF           | Published source value |



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1966 Tesla Tubes

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

1966 TESLA TUBES

Section 1 · Triode

| OTHER                            |                 |                  |
|----------------------------------|-----------------|------------------|
| PARAMETER                        | PUBLISHED VALUE | CONDITION / NOTE |
| Heater voltage                   | 12–14 V         | —                |
| Heater current                   | 260 A           | —                |
| Maximum plate voltage            | 15000 V         | —                |
| Maximum plate dissipation        | 50000 W         | —                |
| Maximum control-grid dissipation | 2000 W          | —                |
| Maximum frequency                | 100 MHz         | —                |

| CAPACITANCE               |                 |                  |
|---------------------------|-----------------|------------------|
| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE |
| Grid-cathode capacitance  | 200 pF          | —                |
| Anode-cathode capacitance | 5 pF            | —                |
| Anode-grid capacitance    | 70 pF           | —                |

| CHARACTERISTIC       |                 |                  |
|----------------------|-----------------|------------------|
| PARAMETER            | PUBLISHED VALUE | CONDITION / NOTE |
| Amplification factor | 60–80           | Published range  |