



ELECTRONIC TUBE REFERENCE

RD50XA

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	31.5 V / 225 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
AMPLIFICATION FACTOR	44
MAXIMUM PLATE VOLTAGE	20000 V
MAXIMUM PLATE DISSIPATION	50000 W
MAXIMUM GRID DISSIPATION	3000 W
Published characteristic ranges are preserved in parameters when no single scalar is printed.	

The TESLA RD50XA tube is a directly heat- Die TESLA-Röhre RD50XA ist eine direkt ed triode of 50 kW anode dissipation, in- geheizte Triode mit 50 kW Anodenverlust- tended for use as an RF power amplifier or leistung, bestimmt als Hochfrequenz-Kraft- oscitlator at frequencies up to 3 Mc/s. verstärker oder Oszüillator für Frequenzen bis zu 3 MHz.



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	31.5 V	Nominal or midpoint of published heater range
Heater current	225 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 Ca/k	7 pF	Published source value
Interelectrode capacitance Cajgl	45 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	30–33 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current	210 A–240 A	—
Maximum plate voltage	20000 V	—
Maximum plate dissipation	50000 W	—
Maximum control-grid dissipation	3000 W	—
Maximum frequency	3 MHz	—
Maximum plate voltage	17000 V	Oscillator; $f < 1$ MHz
Maximum plate voltage	15000 V	Anode modulation; $f < 3$ MHz

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-cathode capacitance	65 pF	—
Anode-cathode capacitance	7 pF	—
Anode-grid capacitance	45 pF	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	44–52	Published range
Plate resistance	2000–2500 ohm	Published range

TUBE TINKER

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