



ELECTRONIC TUBE REFERENCE

RK813

Power - Beam (NOT sweep) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Large Raytheon beam transmitting tetrode for RF oscillator and power-amplifier service, with approximately 125 W plate dissipation and several hundred watts of RF output capability.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	10 V / 5 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Beam Power	
MAXIMUM PLATE VOLTAGE	2250 V
MAXIMUM SCREEN VOLTAGE	400 V
MAXIMUM PLATE DISSIPATION	125 W
<i>Published transmitting-tube maximum voltages/currents, power ratings and capacitances; R-F Oscillator-Amp..</i>	

RK813 is a Raytheon beam tetrode intended for r-f oscillator-amp., with published transmitting-service maximum ratings and capacitances.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Raytheon Special Purpose Tubes

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

195X RAYTHEON SPECIAL PURPOSE TUBES

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament/heater voltage	10 V	Thoriated
Filament/heater current	5 A	Thoriated

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	2250 V	R-F Oscillator-Amp.
Maximum grid-1 voltage	-300 V	R-F Oscillator-Amp.
Maximum grid-2 voltage	400 V	R-F Oscillator-Amp.
Maximum plate current	225 mA	R-F Oscillator-Amp.
Maximum grid-1 current	30 mA	R-F Oscillator-Amp.
Maximum grid-2 current	55 mA	R-F Oscillator-Amp.
Maximum plate dissipation	125 W	R-F Oscillator-Amp.
Maximum drive power	4 W	R-F Oscillator-Amp.
Maximum output power	375 W	R-F Oscillator-Amp.

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.25 pF	Published transmitting-tube table
Input capacitance	16.3 pF	Published transmitting-tube table
Output capacitance	14 pF	Published transmitting-tube table

TUBE TINKER

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

