

RK7577/QK653

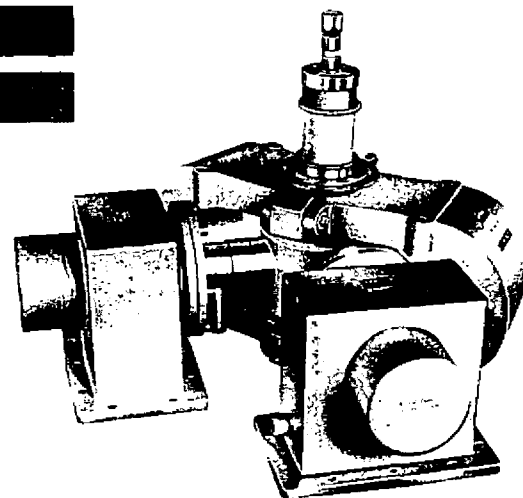
PRELIMINARY

DATA SHEET

RAYTHEON

GENERAL DESCRIPTION

The RK7577/QK653 is a pulsed-type Amplitron capable of producing a minimum peak power of 5.3 megawatts when an rf drive power of no less than 400 kilowatts is applied to its input. When used with a modulator having proper load line characteristics, such as a "line type" modulator, it will cover the frequency band 1280 to 1350 Mc without electrical or mechanical adjustment. It is an integral magnet type tube with waveguide input and output. It requires forced liquid cooling.



Reliable operation and optimum Amplitron life can be achieved only if the radar transmitter is designed with the Amplitron characteristics and peculiarities clearly in mind. This preliminary data sheet is intended only to acquaint the reader with the basic characteristics of this Amplitron and should not be used solely in the system design. The data herein presented a representative of only a small number of prototype models and should not be interpreted as necessarily defining the characteristics of the final tube.

Mechanical Data

Mounting Position	Cathode Vertical
Net Weight	120 Lbs.
Cooling	Liquid
Input Bushing	Oil Immersed
Pressurization	30 psia Min.
RF Couplings	Waveguide

Typical Electrical Data

Heater Current, Preheat	60 Amperes *
Heater Current, Operate	0 Amperes
Heater Voltage @ 60 A	3.8 Volts *
Pulse Duration	1.8 usec
Duty Cycle	.00068
Peak Anode Voltage	97 kilovolts
Peak Anode Current	98 Amperes
Average Power Output	3600 Watts
Life	1000 Hours Min.
Driver Peak Power	400 kilowatts, Min.
Driver Pulse Duration	1.9 usec, Min.

* Not final values

from JEDEC release #3478, Nov. 6, 1961

The specifications for this tube have not been finalized. The tube is being manufactured in limited quantities and is available for engineering analysis purposes only. This engineering information and/or delivery of sample tubes do not imply availability of tubes with the same electrical and/or mechanical characteristics. Changes in ratings and/or dimensions may be made at our discretion as deemed advisable by manufacturing experience or other considerations. For current information concerning this tube contact the nearest Microwave and Power Tubes Regional Sales Representative.

