

ELECTRONIC TUBE REFERENCE

7640

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRAVELINGWAVE

Rugged pulsed traveling-wave power amplifier covering 2-4 GHz, delivering at least approximately 1 kW peak output with 30 dB gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 3 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 TravelingWave	
MAXIMUM PLATE VOLTAGE	8000 V
MAXIMUM CATHODE CURRENT	2 A

The 7640 is a rugged pulse traveling-wave amplifier covering 2 to 4 GHz with 30 dB gain and 1 kW minimum peak output power.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 ITT

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

1962 ITT

Section 1 · TravelingWave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency Range	2.0-4.0 GHz	—
Heater Voltage	6.3 V	—
Heater Current	3 A	—
Minimum Peak Output Power	1000 W	—
Gain	30 dB	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Anode Voltage	8000 V	—
Maximum Shell Current	800 mA	—
Maximum Collector Voltage	8000 V	—
Maximum Collector Dissipation	160 W	—
Maximum RF Input Power	2 W	—
Maximum RF Output Power	30 W	—
Maximum Duty Cycle	0.01	—
Maximum Beam Pulse Width	100 us	—
Maximum Cathode Current	2 A	—