

ELECTRONIC TUBE REFERENCE

7847

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRAVELINGWAVE

Helix traveling-wave power amplifier for 5-6 GHz service, producing about 10 watts with at least 27 dB gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 2.2 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 TravelingWave	
MAXIMUM PLATE VOLTAGE	3000 V
MAXIMUM CATHODE CURRENT	70 mA

The F-7847 is a helix traveling-wave power amplifier for 5 to 6 GHz operation, producing approximately 10 W with at least 27 dB gain.

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	5.0-6.0 GHz	—
Heater Voltage	6.3 V	—
Heater Current	2.2 A	—
RF Output Power	10 W	—
Minimum Gain	27 dB	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Anode Voltage	3000 V	—
Maximum Cathode Current	70 mA	—
Maximum Collector Dissipation	200 W	—
Maximum Duty Cycle	1	—

TUBE TINKER

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and their source documents.

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