



ELECTRONIC TUBE REFERENCE

F2147

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRAVELINGWAVE

Miniature rugged very-broadband metal-ceramic traveling-wave amplifier covering 2.5–7.5 GHz with approximately 45 dB minimum gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 800 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 TravelingWave	
MAXIMUM PLATE VOLTAGE	2200 V
MAXIMUM CATHODE CURRENT	95 mA

The F-2147 is a miniature, lightweight, very-broadband metal-ceramic PPM-focused traveling-wave amplifier covering 2.5–7.5 GHz for rugged environmental applications.

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	2.5-7.5 GHz	—
Output Power Typical	15 W	—
Output Power Minimum	12 W	—
Power Gain Typical	47 dB	—
Power Gain Minimum	45 dB	—
Noise Figure Typical	29 dB	—
Cathode Voltage	-2150 V	—
Cathode Current Typical	80 mA	—
Anode Voltage Typical	180 V	—
Heater Voltage	6.3 V	—
Heater Current Typical	800 mA	—
Collector Voltage Typical	-1950 V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Noise Figure Maximum	32 dB	—
Cathode Current Maximum	95 mA	—
Anode Voltage Maximum	500 V	—
Heater Current Maximum	1 A	—

TUBE TINKER

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

