



ELECTRONIC TUBE REFERENCE

F2131

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRAVELINGWAVE

Miniature rugged metal-ceramic PPM-focused traveling-wave amplifier covering 7-17 GHz with wide bandwidth and tens-of-watts output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 700 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 TravelingWave	
MAXIMUM PLATE VOLTAGE	4000 V
MAXIMUM CATHODE CURRENT	130 mA

The F-2131 is a miniature, lightweight metal-ceramic PPM-focused traveling-wave amplifier covering 7-17 GHz, designed 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	7.0-17.0 GHz	—
Output Power Typical	30 W	—
Output Power Minimum	20 W	—
Power Gain Typical	57 dB	—
Power Gain Minimum	45 dB	—
Noise Figure Typical	30 dB	—
Cathode Voltage	-3900 V	—
Cathode Current Typical	95 mA	—
Anode Voltage Typical	180 V	—
Heater Voltage	6.3 V	—
Heater Current Typical	700 mA	—
Helix Current Typical	5 mA	—
Collector Voltage Typical	-1950 V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Noise Figure Maximum	32 dB	—
Cathode Current Maximum	130 mA	—
Anode Voltage Maximum	500 V	—
Heater Current Maximum	800 mA	—
Helix Current Maximum	12 mA	—