



ELECTRONIC TUBE REFERENCE

F2502

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRAVELINGWAVE

All-metal/ceramic PPM-focused cathode-pulsed traveling-wave power amplifier providing at least 1 kW peak output; the manufacturer source contains conflicting frequency-range figures.

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

SECTION 1 TravelingWave	
MAXIMUM PLATE VOLTAGE	8000 V
MAXIMUM CATHODE CURRENT	1.5 A

The F-2502 is an all-metal/ceramic, PPM-focused cathode-pulsed traveling-wave amplifier with 1 kW minimum peak output; the source itself prints conflicting 2-4 and 4-8 GHz frequency ranges.

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 - Printed Parameter Table	2.0-4.0 GHz	—
Frequency Range - Description	4.0-8.0 GHz	—
Minimum Peak Output Power	1000 W	—
Minimum Gain	30 dB	—
Beam Voltage	8000 V	—
Duty Cycle	0.02	—
Objective Duty Cycle	0.05	—
Heater Voltage	6.3 V	—
Cooling	Forced Air	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Cathode Current	1.5 A	—
Maximum Pulse Width	50 us	—
Heater Current Maximum	3 A	—

TUBE TINKER

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