



ELECTRONIC TUBE REFERENCE

F2510

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRAVELINGWAVE

Wideband voltage-tunable backward-wave oscillator covering approximately 4-8.2 GHz for swept-signal, radar, ECM, and local-oscillator applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 960 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 TravelingWave	
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM CATHODE CURRENT	15 mA

The F2510 is a highly stable, permanent-magnet-focused backward-wave oscillator for swept-signal, frequency-diversity transmitter, radar, and ECM local-oscillator 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	4–8.2 GHz	—
Power Output	25–175 mW	—
Minimum Output Power	25 mW	—
Heater Voltage	6.3 V	—
Heater Current Typical	960 mA	—
Spurious Output Below Signal Minimum	40 dB	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current Maximum	1.2 A	—
Anode Voltage Maximum	250 V	—
Anode Current Maximum	1 mA	—
Cathode Current Maximum	15 mA	—
Helix Current Maximum	6 mA	—
Collector Voltage Maximum	150 V	With respect to helix

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode-to-All-Electrodes Capacitance Maximum	50 pF	—
Grid-to-All-Electrodes Capacitance Maximum	45 pF	—
Helix-to-All-Other-Electrodes-and-Capsule Capacitance Maximum	200 pF	—

TUBE TINKER

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and their source documents.

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