



ELECTRONIC TUBE REFERENCE

X392

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRAVELINGWAVE

Backward-wave frequency converter covering approximately 1.47-2.67 GHz, combining amplifier and oscillator structures on a common electron beam to produce a 130 MHz intermediate-frequency output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 1.9 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 TravelingWave

No fixed ratings recorded.

Specialized microwave/image-intensifier device. Published beam, cathode, anode, helix, collector, RF, gain/noise, and optical ratings are preserved in TUBE_SECTION_PARAMETER rather than forced into unrelated promoted plate/screen fields.

Backward-wave converter tube covering 1470-2670 MHz, combining backward-wave amplifier and oscillator RF structures in one envelope with a common electron beam; 130 MHz IF.

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
Operating Frequency Range	1470–2670 MHz	—
Input Section Bandwidth	10–30 MHz	—
Noise Figure	20 dB	—
IF Output	130 MHz	—
Image Rejection	35 dB	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Conversion Gain	0 dB	—
Heater Voltage Maximum	6.5 V	—
Heater Current Maximum	2 A	—
Cathode Voltage Range	-1400--250 V	—
Cathode Current Maximum	8 mA	—
Collector Voltage Maximum	250 V	—
Amplifier Helix Current Maximum	0.5 mA	—
Oscillator Helix Current Maximum	0.3 mA	—
Collector Current Maximum	8 mA	—
Typical RF Frequency	2000 MHz	—
Typical L0 Frequency	1870 MHz	—
Typical Image Frequency	1740 MHz	—
Typical IF Frequency	130 MHz	—
Typical Heater Voltage	6.3 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Heater Current	1.9 A	—

TUBE TINKER

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and their source documents.

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