

ELECTRONIC TUBE REFERENCE

X368

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRAVELINGWAVE

8-12 GHz intermediate-power traveling-wave amplifier with helical slow-wave structure and permanent-magnet focusing, providing at least 50 mW output and approximately 35 dB 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

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.

8-12 GHz intermediate-power traveling-wave amplifier with helical slow-wave structure and permanent-magnet focusing.

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	8–12 GHz	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Small Signal Gain Minimum	35 dB	—
Gain at Rated Output Minimum	30 dB	—
Power Output Minimum	50 mW	—
Cathode Voltage Maximum	-1600 V	—
Cathode Current Maximum	8 mA	—
Collector Current Maximum	8 mA	—
Helix Current Maximum	2 mA	—
Focus Electrode Voltage Maximum	-100 V	—
Beam Duty Cycle Maximum	100 percent	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Control Electrode Capacitance	20 pF	—

TUBE TINKER

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker