



ELECTRONIC TUBE REFERENCE

UV42

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRAVELINGWAVE

Russian traveling-wave tube; Hf power amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 675 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 TravelingWave

No fixed ratings recorded.

Application: Hf power amplification. Cathode type: Oxide, indirect heating; Output type: Coaxial; Envelope: Glass with metal envelope; Mass: 1.8kg; Cooling method: Natural; Frequency range: 6.9 cm; Frequency range Minimum: 5.6 cm; Frequency range Maximum: 8.1 cm; Gain: 20 dB; Gain Minimum: 10 dB; Gain Maximum: 30 dB; Filament voltage, v: 6.3; Filament current, a: 0.675; Filament current, a Minimum: 0.5; Filament current, a Maximum: 0.85; First anode voltage, v: 225; First anode voltage, v Minimum: 150; First anode voltage, v Maximum: 300; Slow-wave circuit voltage, v: 1300; Slow-wave circuit voltage, v Minimum: 1200; Slow-wave circuit voltage, v Maximum: 1400; Control electrode voltage, v: 50; Collector voltage, v: 1400; External loading agreement coefficient: 3.5; Noise coefficient: 31.5 dB; Noise coefficient Minimum: 30 dB; Noise coefficient Maximum: 33 dB

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

2026 Russian Traveling Wave

Published test conditions and operating points. Values on this page are preserved as reported by this source.

2026 RUSSIAN TRAVELING WAVE

Section 1 · TravelingWave

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Wavelength	5.6–8.1 cm	Wavelength, not frequency
SlowWaveStructureVoltage	1200–1400 V	slow-wave circuit voltage, v
FirstAnodeVoltage	150–300 V	first anode voltage, v
Gain	10–30 dB	gain