



ELECTRONIC TUBE REFERENCE

2S49D

Voltage - Triode (single high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Russian 2S49D (2C49Д) ruggedized indirectly heated subminiature metal-glass UHF triode for decimeter-band oscillation and amplification, with 2.4 V 0.48 A heater.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	2.4 V / 480 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.006 S
AMPLIFICATION FACTOR	65
MAXIMUM PLATE VOLTAGE	700 V
MAXIMUM PLATE DISSIPATION	4 W
MAXIMUM GRID DISSIPATION	0.8 W
Katsnelson/Larionov 1981 2C49Д rugged UHF triode. Maximum CONTINUOUS plate voltage 300 V; maximum PULSED plate voltage 700 V (scalar max_plate_voltage=700 is PULSED ONLY). Max plate dissipation 4 W, grid dissipation 0.8 W; max average cathode current 50 mA, peak pulse cathode current 800 mA (not assigned to generic cathode scalar). Nominal μ 65 ± 10, $g_m \geq 0.006$ A/V. Typical at plate 250 V grid -1 V, anode current 21 ± 7 mA. Pulsed RF ≥ 55 W at 200 MHz with anode 700 V, grid -40 V, 1 μs pulses at 250 Hz; continuous RF output ≥ 2 W. Input C 2.85 ± 0.45 pF, output ≤ 0.1 pF, transfer 1.65 ± 0.35 pF, cathode-heater 2.4-5 pF. Heater 2.4 V 0.48 A, cathode-heater max 100 V, max seal 170°C, life ≥ 500 h. Ruggedized metal-glass disk contact construction.	

2S49D triode from a Russian vacuum-tube reference; technical description translated to English.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1981 Russian Tubes Katsnelson and Larionov

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

1981 RUSSIAN TUBES KATSNELSON AND LARIONOV

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	6 mA/V	Крутизна характеристики , 6 мА/В
Service life	>500 h	Наработка в 2>500 ч
Heater voltage	2.15–92.7 V	Напряжение накала , 2,15—92,7 В
Transconductance	>1.46 mA/V	крутизна характеристики >1,46 мА/В

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