



ELECTRONIC TUBE REFERENCE

2B5

Voltage - Dual Triode (similar high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Sylvania 2B5 directly heated subminiature dual HF triode for voltage amplification to 150 MHz, with selectable 2 V series or 1.2 V parallel filament configuration.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	2 V / 130 mA	PARALLEL HEATER	1.2 V / 260 mA
HEATING	Direct	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	18700 Ω
TRANSCONDUCTANCE	0.00115 S
AMPLIFICATION FACTOR	21.5
MAXIMUM PLATE VOLTAGE	110 V
MAXIMUM PLATE DISSIPATION	0.55 W
MAXIMUM CATHODE CURRENT	5 mA
Sylvania RTMA 1951 2B5 physical triode section 1. Design-center maximum plate 110 V, dissipation 0.55 W, cathode current 5 mA, grid voltage positive max 0 V and negative limit -20 V. Typical at plate 90 V, grid -1 V, filament 1.2 V parallel: I_a 2.6 mA, g_m 0.00115 A/V, μ 21.5, r_p 18700 Ω. Grid-plate capacitance 1.2 pF; shielded/unshielded input 0.9/0.8 pF, output 1.9/0.8 pF. Cross-section grid-grid unshielded 0.046 pF, plate-plate 0.7 pF. Series filament requires external balancing resistor; 8DP flexible lead basing.	

SECTION2 Triode	
PLATE RESISTANCE	18700 Ω
TRANSCONDUCTANCE	0.00115 S
AMPLIFICATION FACTOR	21.5
MAXIMUM PLATE VOLTAGE	110 V
MAXIMUM PLATE DISSIPATION	0.55 W
MAXIMUM CATHODE CURRENT	5 mA
<i>Sylvania RTMA 1951 2B5 physical triode section 2. Design-center maximum plate 110 V, dissipation 0.55 W, cathode current 5 mA, grid voltage positive max 0 V and negative limit -20 V. Typical at plate 90 V, grid -1 V, filament 1.2 V parallel: Ia 2.6 mA, gm 0.00115 A/V, mu 21.5, rp 18700 Ω. Grid-plate capacitance 1.2 pF; shielded/unshielded input 0.9/0.7 pF, output 2.2/0.9 pF. Cross-section grid-grid unshielded 0.046 pF, plate-plate 0.7 pF. Series filament requires external balancing resistor; 8DP flexible lead basing.</i>	

Subminiature double triode capable of operation to 150 MHz as a voltage amplifier.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
operation up to 150 megacycles as a voltage amplifier,	150 MHz	operation up to 150 megacycles as a voltage amplifier,
Fllament Voltage .eveeeeecevosssnsnee Lot 1,2 volts	1.2 V	Fllament Voltage .eveeeeecevosssnsnee Lot 1,2 volts
Plate Voltage (dc).....-o.- ooooouoo--auon----- 90 volts	90 V	Plate Voltage (dc).....-o.-ooooouoo--auon----- 90 volts
OGrid Voltage (AC).eerececssossresosnnncannes -1.0 volts	-1 V	OGrid Voltage (AC).eerececssossresosnnncannes -1.0 volts
Grid Voltage for 10 uamps Flate Current .ecccees 6.0 volts	6 V	Grid Voltage for 10 uamps Flate Current .ecccees 6.0 volts
OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Dissipation {each section)ecesees 0.55 watts	0.55 W	Maximum Plate Dissipation {each section)ecesees 0.55 watts