



ELECTRONIC TUBE REFERENCE

21EX6

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

High-perveance beam-power pentode designed primarily for television horizontal-deflection amplification and high pulse-current sweep service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	12
NOMINAL HEATER	21.5 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
PLATE RESISTANCE	18000 Ω
TRANSCONDUCTANCE	0.0077 S
AMPLIFICATION FACTOR	4.4
MAXIMUM PLATE VOLTAGE	770 V
MAXIMUM SCREEN VOLTAGE	195 V
MAXIMUM PLATE DISSIPATION	18 W
MAXIMUM SCREEN DISSIPATION	3.5 W
MAXIMUM CATHODE CURRENT	220 mA
MAXIMUM HEATER-CATHODE VOLTAGE	200 V
WARM-UP TIME	11 s
Published promoted fields populated by printed ratings/characteristics headings.	

High-perveance beam-power pentode designed primarily for television horizontal-deflection amplifier service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Negative Pulse Plate Voltage	1500 V	HorizontalDeflection
Peak Cathode Current	770 mA	HorizontalDeflection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	7700 uS	Typical



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 3 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 3 OF 4

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC plate-supply voltage	550 V	HorizontalDeflection
Peak positive pulse plate voltage	7000 V	HorizontalDeflection
Peak negative pulse plate voltage	-1500 V	HorizontalDeflection
Maximum grid #2 voltage	175 V	HorizontalDeflection

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak negative grid #1 voltage	-300 V	HorizontalDeflection
Average cathode current	110 mA	HorizontalDeflection
Peak cathode current	400 mA	HorizontalDeflection
Plate voltage	250 V	AverageCharacteristics
Grid #2 voltage	150 V	AverageCharacteristics
Plate current	90 mA	AverageCharacteristics
Grid #2 current	6 mA	AverageCharacteristics

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	18000 ohm	AverageCharacteristics
Transconductance	7300 uS	AverageCharacteristics
Triode amplification factor	4.3	TriodeConnection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #1-to-plate capacitance	1.1 pF	—
Input capacitance	22 pF	—
Output capacitance	10 pF	—

TUBE TINKER

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