

ELECTRONIC TUBE REFERENCE

50FA5

Power - Pentode Single (NOT beam) (under 10W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Low-voltage audio power pentode for 100 mA series-heater equipment, providing approximately 1.5 W Class A output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7CV	BASE PINS	7
NOMINAL HEATER	40 V / 100 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7CV - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN1 – K	A	K – Cathode	CONNECTED
PIN2 – G1	A	G1 – Control Grid	CONNECTED
PIN3 – H	–	H – Heater	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – G1	A	G1 – Control Grid	CONNECTED
PIN6 – G2	A	G2 – Screen Grid	CONNECTED
PIN7 – P	A	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	13000 Ω
TRANSCONDUCTANCE	0.0058 S
MAXIMUM PLATE VOLTAGE	150 V
MAXIMUM SCREEN VOLTAGE	130 V
MAXIMUM PLATE DISSIPATION	5.2 W
MAXIMUM SCREEN DISSIPATION	1.1 W
<i>Promoted from published ratings/characteristics tables; additional published values retained in TUBE_SECTION_PARAMETER.</i>	

Low-current-heater power pentode. The supplied datasheet provides maximum ratings and representative Class A operating characteristics for receiver/audio output applications.



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	40 V	—
Heater current	100 mA	—
Heater warm-up time	20 s	SeriesString
Plate voltage	110 V	ClassA1
Screen voltage	110 V	ClassA1
Maximum signal power output	1.5 W	ClassA1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.28 pF	—
Input capacitance	11 pF	—
Output capacitance	8.5 pF	—



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical plate voltage	130 V	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical screen voltage	110 V	ClassA
Zero-signal plate current	40 mA	ClassA
Load resistance	2500 ohm	ClassA
Maximum-signal power output	1.5 W	ClassA
Maximum plate voltage	150 V	PromotedValue
Maximum screen voltage	130 V	PromotedValue
Maximum plate dissipation	5.2 W	PromotedValue
Maximum screen dissipation	1.1 W	PromotedValue
Grid #2 Dissipation	1.1 W	PublishedTable

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	13000 ohm	PromotedValue
Transconductance	0.0084 A/V	PromotedValue
Grid #1 To Plate	0.28 pF	PublishedTable
Input; Gi To (K+G3+G2+Hj	11 pF	PublishedTable
Peak Af Grid #1 Voltage	7.5 V	PublishedTable
2Er0- Signal Plate Current	40 mA	PublishedTable
Max.-Signal Plate Current	41 mA	PublishedTable
Plate Resistance (Approx.)	13000 ohm	PublishedTable

TUBE TINKER

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and their source documents.

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