



ELECTRONIC TUBE REFERENCE

EL12SP

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Power/output pentode designed for audio-frequency power amplification in single-ended or push-pull output stages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 1.2 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.01 S
MAXIMUM PLATE VOLTAGE	425 V
MAXIMUM SCREEN VOLTAGE	425 V
MAXIMUM PLATE DISSIPATION	18 W
MAXIMUM SCREEN DISSIPATION	2.5 W
MAXIMUM CATHODE CURRENT	120 mA
<i>Published ratings and characteristics promoted from the approved source.</i>	

Special EL12 power pentode selected for high-output push-pull class-AB audio operation.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1953 RFT Rundfunk Technik

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

1953 RFT RUNDFUNK TECHNIK

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage, two-tube push-pull AB	425 V	ClassAB;PushPull;TwoTubes
Screen-grid voltage	425 V	ClassAB;PushPull;TwoTubes
Plate current	84 mA	ClassAB;PushPull;TwoTubes
Screen-grid current	10 mA	ClassAB;PushPull;TwoTubes
Load resistance plate-to-plate	5 k Ω	PushPull
Cold plate voltage maximum	650 V	—
Cold screen-grid voltage maximum	650 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Audio output power	43 W	PushPull
Distortion	6.5 %	At43WOutput

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	17.5 pF	—
Output capacitance	7 pF	—
Grid-to-plate capacitance	<0.7 pF	—



1959 Telefunken

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

1959 TELEFUNKEN
Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	425 V	ClassAB;PushPull;TwoTubes
Screen-grid voltage	425 V	ClassAB;PushPull;TwoTubes
Plate quiescent current	30 mA	ClassAB;PushPull;PerTube
Screen-grid quiescent current	5 mA	ClassAB;PushPull;PerTube
Cathode resistor	325 Ohm	ClassAB;PushPull;PerTube
Plate-to-plate load resistance	6000 Ohm	ClassAB;PushPull;TwoTubes
Output power	45 W	ClassAB;PushPull;TwoTubes
Plate cold voltage	650 V	—
Screen-grid cold voltage	650 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance maximum	0.7 pF	—