



ELECTRONIC TUBE REFERENCE

5591

Voltage - Pentode High Frequency (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Long-life low-noise RF and broadband pentode developed for professional high-frequency amplifier service and replacement of 5654/6AK5-class types.

GENERAL CHARACTERISTICS

BASE DESIGNATION	E7-1	BASE PINS	7
NOMINAL HEATER	6.3 V / 150 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	350000 Ω
TRANSCONDUCTANCE	0.0051 S
AMPLIFICATION FACTOR	28
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM SCREEN VOLTAGE	155 V
MAXIMUM PLATE DISSIPATION	1.85 W
MAXIMUM SCREEN DISSIPATION	0.5 W
<i>Published maximum ratings and characteristic constants promoted; identical twin sections compressed when applicable.</i>	

RF and broadband amplifier pentode, described as a long-life replacement for 5654 and 6AK5.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 Western Electric Random 2

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

1960 WESTERN ELECTRIC RANDOM 2

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen voltage, operating condition	120 V	Representative published column

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance, alternate condition	4300 μ S	Published alternate operating column
Transconductance, alternate condition	5100 μ S	Published alternate operating column



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Ericsson Longlife

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

1965 ERICSSON LONGLIFE

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage	130 V	ClassA
Screen-grid supply voltage	130 V	ClassA
Cathode bias resistor	200 Ω m	ClassA
Plate current	8 mA	ClassA
Screen-grid current	2 mA	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance minimum	4000 uS	—
Transconductance maximum	6200 uS	—
Plate current maximum	10.8 mA	—
Screen-grid current maximum	2.7 mA	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	5100 uS	ClassA
Plate resistance	0.35 MOhm	ClassA
Screen-to-control-grid amplification factor	28 ratio	ClassA
Equivalent noise resistance	1600 Ohm	ClassA
Input conductance at 100 MHz	125 uS	ClassA


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

196X LM Ericsson

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

196X LM ERICSSON

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	150 mA	—
Plate resistance	1600 ohm	—
Transconductance	125 uS	—
Amplification factor	2	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	200 V	—
Maximum screen voltage	155 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	1.85 W	—

TUBE TINKER

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