



ELECTRONIC TUBE REFERENCE

6028

Voltage - Pentode Sharp Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Sharp-cutoff pentode designed for RF, VHF/UHF, wide-band, or voltage-amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	E7-1	BASE PINS	7
NOMINAL HEATER	20 V / 50 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	300000 Ω
TRANSCONDUCTANCE	0.005 S
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM SCREEN VOLTAGE	140 V
MAXIMUM PLATE DISSIPATION	1.7 W
MAXIMUM SCREEN DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	12 mA
MAXIMUM HEATER-CATHODE VOLTAGE	75 V
<i>Promoted fields mapped from printed maximum-rating and characteristic headings; additional published values preserved in parameter rows.</i>	

The 6028 is a 7-pin sharp-cutoff pentode intended for RF applications requiring a high degree of reliability, long life and stable performance.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	4 pF	—
Output capacitance	2.8 pF	—
Grid-to-plate capacitance	0.02 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	120 V	ClassA
Screen voltage	120 V	ClassA
Cathode resistor	180 ohm	ClassA
Plate current	7.5 mA	ClassA
Screen current	2.5 mA	ClassA
Plate resistance	300000 ohm	ClassA
Transconductance	5000 uS	ClassA

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage	120 V	ClassA
Screen-grid supply voltage	120 V	ClassA
Cathode bias resistor	200 Ohm	ClassA
Zero-signal plate current	7.5 mA	ClassA
Maximum-signal plate current	7.7 mA	ClassA
Zero-signal screen-grid current	1.9 mA	ClassA
Maximum-signal screen-grid current	2.7 mA	ClassA
Load resistance	15000 Ohm	ClassA
Power output	0.325 W	ClassA
Total harmonic distortion	12 %	ClassA
Transconductance minimum	3900 uS	—
Transconductance maximum	6000 uS	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	5000 uS	ClassA
Plate resistance	0.3 MOhm	ClassA
Screen-to-control-grid amplification factor	24 ratio	ClassA



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1966 Tung Sol Electronic Tubes 4 of 4

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

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 1 to plate capacitance maximum	0.02 pF	WholeTube
Input capacitance	3.9 pF	WholeTube
Output capacitance	2.85 pF	WholeTube

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	200 V	WholeTube
Maximum grid 2 supply voltage	155 V	WholeTube
Maximum cathode current	20 mA	WholeTube
Maximum plate dissipation	1.85 W	WholeTube
Maximum grid 2 dissipation	0.55 W	WholeTube
Maximum heater-cathode voltage	75 V	WholeTube
Plate supply voltage	120 V	ClassA1
Grid 2 supply voltage	120 V	ClassA1
Cathode resistor	200 ohm	ClassA1
Grid 1 voltage	0 V	ClassA1
Plate current	7 mA	ClassA1
Grid 2 current	2.25 mA	ClassA1
Transconductance	4950 uS	ClassA1
Plate resistance	340000 ohm	ClassA1



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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196X LM Ericsson

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

196X LM ERICSSON

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	20 V	—
Heater current	50 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	—
Maximum plate dissipation	1.85 W	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

2026 Western Electric 400s

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

2026 WESTERN ELECTRIC 400S

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current ., , Eb = Eg	120 milliamperes	Plate Current ., , Eb = Eg2 ~ 120 volis; . 7.5 milliamperes
Transconductance . Cathode-Bias Resistor =	200 micromhos	Transconductance . Cathode-Bias Resistor = 200 chms { 5000 micromhos
Heafer Voltage, A-C or D-C & . &« v v o v « «	20 volts	Heafer Voltage, A-C or D-C & . &« v v o v « « . 20 volts
Cathode Current ., . . « & & & v v	4 milliamperes	Cathode Current ., . . « & & & v v 4 4 4 v o 4 e e v a 12 milliamperes
Heater-Cathkode Voltagel e e e e e e e e e e e e	120 volts	Heater-Cathkode Voltagel e e e e e e e e e e e e e e 120 volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance . « o o o o = + « s o ¢ » o <	5000 micromhos	Transconductance . « o o o o = + « s o ¢ » o < 5000 5600 micromhos
Load Resistance . . . « . v ¢ ¢« « = & o s s =«	15000 ohms	Load Resistance . . . « . v ¢ ¢« « = & o s s =« 15000 15C00 ohms
Total Harmonis Distortion . + - + o « o s o <	12 per cent	Total Harmonis Distortion . + - + o « o s o < 12 5.5 per cent
Plcte Current of	10 volts	Plcte Current of 10 Microampares « - -6.8 -6.8 volts
voltage should not exceed	90 volts	voltage should not exceed 90 volts.
SCREEN GRID VOLTAGE=	120 VOLTS	SCREEN GRID VOLTAGE=120 VOLTS
SCREEN GRID VOLTAGE=	120 VOLTS	- SCREEN GRID VOLTAGE=120 VOLTS

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Dissipation . . & . v v v ¢ o v	4 watts	Plate Dissipation . . & . v v v ¢ o v 4 @ ¢ 4 e e e e 1.7 watts

TUBE TINKER

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