



ELECTRONIC TUBE REFERENCE

5GX6

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Dual-control sharp-cutoff pentode developed primarily for FM sound-detector service and specialized television circuits. Separate control grids independently influence plate current, enabling detector, gating, mixing, and control functions beyond conventional pentode amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	4.7 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	140000 Ω
TRANSCONDUCTANCE	0.0037 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM SCREEN DISSIPATION	0.65 W
Sharp-cutoff pentode with two independent control grids; electrical counterpart retained.	

5GX6 is a Pentode device. Sharp-cutoff dual-control-grid pentode intended primarily for FM sound-detector 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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	4.7 V	—
Heater current	600 mA	—



SOURCE OPERATING CONDITIONS

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1966 Tung Sol Electronic Tubes 1 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater warm-up time	11 s	—
Grid 1-to-plate transconductance	3700 μ S	—
Grid 3-to-plate transconductance	750 μ S	—
Plate resistance	0.14 M Ω m	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 1 to plate capacitance	0.26 pF	—
Grid 1 to grid 3 capacitance	0.72 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 3 to plate capacitance	1.6 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum grid 2 supply voltage	300 V	—
Plate supply voltage	150 V	FM sound detector
Grid 3 supply voltage	0 V	FM sound detector
Grid 2 supply voltage	100 V	FM sound detector
Grid 1 supply voltage	0 V	FM sound detector
Cathode resistor	180 ohm	FM sound detector
Plate current	3.7 mA	FM sound detector
Grid 2 current	3 mA	FM sound detector


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1971 RCA HB3 Binder 4 of 7

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

1971 RCA HB3 BINDER 4 OF 7

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	DualControlAmplifier
Screen voltage	125 V	DualControlAmplifier
Plate current	10 mA	DualControlAmplifier
Screen current	3.5 mA	DualControlAmplifier
Maximum plate voltage	330 V	—
Maximum screen voltage	330 V	—
Maximum plate dissipation	3 W	—
Maximum screen dissipation	0.65 W	—
Heater/filament voltage	4.7 V	DerivativeSheet

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament current	600 mA	DerivativeSheet
Heater warm-up time	11 s	ControlledWarmup

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 transconductance	9500 μS	DualControlAmplifier
Grid No.3 transconductance	7125 μS	DualControlAmplifier
Plate resistance	180000 ohm	DualControlAmplifier

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1-to-plate capacitance	0.02 pF	—
Grid No.3-to-plate capacitance	0.8 pF	—

TUBE TINKER

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