



ELECTRONIC TUBE REFERENCE

6SC7

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

High-mu twin triode with a common cathode, intended for voltage-amplifier service and suited to resistance-coupled audio amplification and phase-inverter circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	RETMA 8S	BASE PINS	8
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	53000 Ω
TRANSCONDUCTANCE	0.001325 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM CATHODE CURRENT	10 mA
Representative row for identical sections.	

SECTION2 Triode	
No fixed ratings recorded.	
Source-derived section; promoted values populated where applicable.	

The 6SC7 is a DualTriode intended for high-mu voltage-amplifier service. Published ratings, characteristics and typical operating data from the supplied datasheet were captured.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1940 RCA

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

1940 RCA

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
The 6SC7 is a new, single-ended, metal, twin triode amplifier intended	6	The 6SC7 is a new, single-ended, metal, twin triode amplifier intended
HEATER VOLTAGE (A.C. or D.C.)	6.3 V	HEATER VOLTAGE (A.C. or D.C.) 6.3 Volts
HEATER CURRENT	300 mA	HEATER CURRENT 0.3 Ampere
HEATER VOLTAGE	6.3 V	HEATER VOLTAGE 6.3 Volts
PLATE VOLTAGE 250 max. Volts	250 V	PLATE VOLTAGE 250 max. Volts
GRID VOLTAGE	-2 V	GRID VOLTAGE -2 Volts
AMPLIFICATION FACTOR	70	AMPLIFICATION FACTOR 70
PLATE CURRENT	2 mA	PLATE CURRENT 2 Milliamperes
Plate-voltage Supply 90	300 V	Plate-voltage Supply 90 300 Volts
Plate Load RL 250000	250000 ohm	Plate Load RL 250000 250000 Ohms
following stage 0.5	0.5 ohm	following stage 0.5 0.5 Megohm
Cathode Resistor (R.) *x 3750	1675 ohm	Cathode Resistor (R.) *x 3750 1675 Ohms
voltage Output 9 55 Peak Volts	55 V	voltage Output 9 55 Peak Volts
Voltage Gain3	42 V	Voltage Gain3 30 42
1 Voltage at plate equals Plate-Supply Voltage minus voltage drop In R and Rc. For	1 V	1 Voltage at plate equals Plate-Supply Voltage minus voltage drop In R and Rc. For
other supply voltages differing by as much as 50% from those listed, the values of re	50 V	other supply voltages differing by as much as 50% from those listed, the values of re

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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA;EachUnit

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	2 mA	ClassA;EachUnit



SOURCE DATA APPENDIX

1966 Tung Sol Electronic Tubes 2 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1325 μ S	ClassA
Plate resistance	53000 ohm	ClassA
Amplification factor	70	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	3 pF	Section1
Output capacitance	3 pF	Section1

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA
Grid Voltage	-2 V	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	2 mA	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-Plate Capacitance	2 pF	EachSection