

ELECTRONIC TUBE REFERENCE

12SL7GT

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Octal high-mu twin triode designed for resistance-coupled voltage amplification and phase inversion, providing two similar Class-A triode sections for low-level signal service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8BD	BASE PINS	8
NOMINAL HEATER	12.6 V / 150 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

8BD - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 2G1	B	G1 – Control Grid	CONNECTED
PIN2 – 2P	B	P – Plate (Anode)	CONNECTED
PIN3 – 2K	B	K – Cathode	CONNECTED
PIN4 – 1G1	A	G1 – Control Grid	CONNECTED
PIN5 – 1P	A	P – Plate (Anode)	CONNECTED
PIN6 – 1K	A	K – Cathode	CONNECTED
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – H	–	H – Heater	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	44000 Ω
TRANSCONDUCTANCE	0.0016 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	10 mA
<i>Published promoted fields populated semantically; identical repeated sections compressed.</i>	

SECTION2 Triode	
PLATE RESISTANCE	44000 Ω
TRANSCONDUCTANCE	0.0016 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	10 mA
<i>Physical triode row restored under current one-row-per-physical-section policy.</i>	

High-mu twin triode used as a phase inverter and in resistance-coupled amplifier circuits.

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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA;EachSection
Control-grid voltage	-2 V	ClassA;EachSection
Plate current	2.3 mA	ClassA;EachSection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	44000 Ω	EachSection
Transconductance	1600 μS	EachSection
Amplification factor	70	EachSection

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Ferranti Technical Handbook

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

1961 FERRANTI TECHNICAL HANDBOOK

Section 1 · Triode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Voltage amplifier / phase inverter	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 3 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 3 OF 4

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical plate voltage	250 V	EachSection
Typical plate current	2.3 mA	EachSection
Typical grid voltage	-2 V	EachSection
Maximum plate voltage	300 V	PromotedValue
Maximum plate dissipation	1 W	PromotedValue

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	2.8 pF	EachSection
Input capacitance	3.2 pF	EachSection
Output capacitance	3.4 pF	EachSection

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	44000 ohm	PromotedValue
Transconductance	0.0016 A/V	PromotedValue
Amplification factor	70	PromotedValue

1971 RCA HB3 Binder 5 of 7

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

1971 RCA HB3 BINDER 5 OF 7
Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	12.6 V	—
Heater current	150 mA	—
Plate voltage	250 V	ClassA;EachSection
Grid voltage	-2 V	ClassA;EachSection
Plate current	2.3 mA	ClassA;EachSection
Maximum plate voltage	300 V	EachSection
Plate dissipation	1 W	EachSection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	44000 ohm	EachSection
Transconductance	1600 uS	EachSection
Amplification factor	70	EachSection



SOURCE DATA APPENDIX

1975 RCA RC30

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

1975 RCA RC30
Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Heater-Cathode Voltage	90 V	TypicalOperation;PublishedValue1
Peak Heater-Cathode Voltage	90 V	TypicalOperation;PublishedValue2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	300 V	MaximumRating
Grid Voltage. Positive-bias value	0 V	MaximumRating
Plate Dissipation	1 W	MaximumRating
Maximum Plate Voltage	300 V	Section1
Maximum Plate Dissipation	1 W	Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	2.8 pF	Capacitance;PublishedValue1
Grid to Plate	2.8 pF	Capacitance;PublishedValue2
Grid to Cathode and Heater	3.4 pF	Capacitance
Plate to Cathode and Heater	3.2 pF	Capacitance

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	Characteristic
Grid Voltage	-2 V	Characteristic
Plate Resistance (Approx. t	44000 ohm	Characteristic
Transconductance	11500 uS	Characteristic
Plato Current	2 mA	Characteristic
Plate Resistance	44000 ohm	Section1
Amplification Factor	70	Section1

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

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