

ELECTRONIC TUBE REFERENCE

6SL7WGT

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Premium ruggedized high-mu twin triode for voltage amplification and phase inversion, constructed for demanding service while retaining 6SL7-family electrical characteristics.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8BD	BASE PINS	8
NOMINAL HEATER	6.3 V / 300 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	20 mA
Published promoted fields populated from printed headings; identical repeated sections compressed.	

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	20 mA
Second identical physical triode section; added to align rows with SectionCount.	

Premium high-mu twin triode for voltage amplification and phase inversion. Data was extracted from the supplied Tung-Sol source, including published ratings, characteristics, and operating information.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Triode

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Rugged construction	Yes	—



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
Maximum plate voltage	300 V	Published handbook rating
Plate voltage	250 V	ClassA OperatingPoint1
Control-grid bias	2 V	ClassA OperatingPoint1
Plate current	2.3 mA	ClassA OperatingPoint1

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	44000 ohm	ClassA OperatingPoint1
Transconductance	1600 μ S	ClassA OperatingPoint1
Amplification factor	70	ClassA OperatingPoint1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating


SOURCE DATA APPENDIX

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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA1;EachUnit

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	2.3 mA	ClassA1;EachUnit


SOURCE DATA APPENDIX

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

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

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AVERAGE CHARACTERISTICS – published value 1	6.3 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
AVERAGE CHARACTERISTICS – published value 2	300 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
LIMITS OF APPLIED VOLTAGE – published value 1	6.31 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
LIMITS OF APPLIED VOLTAGE – published value 2	6 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
PLATE VOLTAGE, DC	275 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
PLATE DISSIPATION, EACH SECTION	1.1 WATTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
PLATE VOLTAGE, DC	250 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
GRID VOLTAGE, DC	-2 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
PLATE CURRENT	2.3 MA	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
AMPLIFICATION FACTOR	70	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
TRANSCONDUCTANCE	1.6	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
PLATE RESISTANCE	44 OHMS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
GRID VOLTAGE FOR 10 μ A PLATE CURRENT – published value 1	10 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
GRID VOLTAGE FOR 10 μ A PLATE CURRENT – published value 2	0 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D CROSS PLATE RESISTOR OF 2,000 OHMS, WITH APPLIED VIBRATIONAL ACCELERATION OF 2.5 e• SECTIONS – published value 1	2 OHMS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
D CROSS PLATE RESISTOR OF 2,000 OHMS, WITH APPLIED VIBRATIONAL ACCELERATION OF 2.5 e• SECTIONS – published value 2	2.5 OHMS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
Z. GAIN MEASURED AT i.0 VOLTS RMS OUTPUT.	0 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
11111111■■■■~■■■■~ A1111111 Ef = 6.3Volts ~'f~ – published value 1	111111111	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
11111111■■■■~■■■■~ A1111111 Ef = 6.3Volts ~'f~ – published value 2	6.3	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	PromotedValue
Maximum plate dissipation	1 W	PromotedValue
Maximum cathode current	20 mA	PromotedValue
MAXIMUM HEATER-CATHODE VOLTAGE	100 VOLTS	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
NOISE OUTPUT VOLTAGE D	200	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.
1. Eo MAXIMUM RMS VOLTAGE OUTPUT FOR FIVE PERCENT (~:) HARMONIC DISTORTION.	1 PERCENT	OCR table transcription; verify against supplied datasheet layout where multiple columns represent operating conditions.

TUBE TINKER

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