

ELECTRONIC TUBE REFERENCE

6900

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Rugged medium-mu twin triode specifically designed for high-current pulse service in missiles, aircraft, military, and industrial equipment, with exceptional shock capability and multiampere peak cathode-current ratings.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 1 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.0115 S
AMPLIFICATION FACTOR	18.5
MAXIMUM PLATE VOLTAGE	600 V
MAXIMUM PLATE DISSIPATION	4.25 W
MAXIMUM CATHODE CURRENT	4.5 A
Published ratings and characteristics promoted from the approved datasheet.	

SECTION2 Triode	
TRANSCONDUCTANCE	0.0115 S
AMPLIFICATION FACTOR	18.5
MAXIMUM PLATE VOLTAGE	600 V
MAXIMUM PLATE DISSIPATION	4.25 W
MAXIMUM CATHODE CURRENT	4.5 A
<i>Second physical triode section; electrically identical twin section.</i>	

Rugged medium-mu twin triode designed specifically for high-current pulse applications in missiles, aircraft, military, and industrial equipment. Electrical ratings, characteristics, operating data, and special environmental information were extracted from the supplied source.



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
Heater voltage	6.3 V	Nominal
Heater current	1 A	Nominal
Plate voltage	600 V	Published operating table; OperatingPoint1
Plate voltage	120 V	Published operating table; OperatingPoint1
Plate voltage	500 V	Published operating table; OperatingPoint1
Peak cathode current	4.5 A	Pulse
Pulse time	10 us	Pulse; BothSectionsParallel
Pulse repetition rate	250 pps	Pulse; BothSectionsParallel

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	36 mA	Published operating table; OperatingPoint1
Transconductance	11500 uS	Published operating table; OperatingPoint1



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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.

1966 TUNG SOL ELECTRONIC TUBES 4 OF 4

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
LIMITS OF APPLIED VOLTAGE – published value 1	6.3 V	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
LIMITS OF APPLIED VOLTAGE – published value 2	0.3 V	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
PLATE VOLTAGE	600 V	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
PEAK CATHODE CURRENT ®SEE CHART	4.5 A	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
PLATE DISSIPATION PER PLATE	4.25 W	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
GRID CIRCUIT RESISTANCE	1 Mohm	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
AVERAGE WARM-UP TIME	45 s	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
PLATE VOLTAGE	120 V	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
GRID VOLTAGE	2 V	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
TRANSCONDUCTANCE	11500	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
AMPLIFICATION FACTOR	18.5	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
PLATE VOLTAGE	500 V	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
GRID PULSE ('egk)	50 V	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID VOLTAGE	-100 V	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
PLATE BIAS VOLTAGE	4.25 A	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
GRID CURRENT	500 mA	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
PULSE TIME	10	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
PULSE REPETITION RATE	250	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
ALTITUDE ®SEE APPLICATION NOTE	80000	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
IMPACT SHOCK	500	Published datasheet table value; multiple values on a source row represent separate limits or operating conditions.
Transconductance	0.0115 A/V	Promoted section value from the supplied datasheet.
Amplification factor	18.5	Promoted section value from the supplied datasheet.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	600 V	Promoted section value from the supplied datasheet.
Maximum plate dissipation	4.25 W	Promoted section value from the supplied datasheet.
Maximum cathode current	4.5 A	Promoted section value from the supplied datasheet.