



ELECTRONIC TUBE REFERENCE

6947

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Premium subminiature medium-mu twin triode designed specifically for guided-missile service, combining general-purpose amplifier characteristics with construction suited to demanding military electronic equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 350 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.004 S
AMPLIFICATION FACTOR	35
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	0.75 W
MAXIMUM CATHODE CURRENT	13 mA
Published source ratings/characteristics promoted where applicable; identical repeated sections compressed.	

SECTION2 Triode	
TRANSCONDUCTANCE	0.004 S
AMPLIFICATION FACTOR	35
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	0.75 W
MAXIMUM CATHODE CURRENT	13 mA
<i>Second physical triode section; electrically identical twin section.</i>	

THE 6947 IS A SUBMINIATURE GENERAL PURPOSE MEDIUM-MU TWIN TRIODE IN THE 8 PIN SUBMINIATURE CONSTRUCTION. IT IS DESIGNED SPECIFICALLY FOR GUIDED MISSILE SERVICE. THIS



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	4000 μ S	—
Amplification Factor	35	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	250 V	—
Maximum Plate Dissipation	0.75 W	—
Maximum Cathode Current	13 mA	—



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	350 mA	Nominal
Plate voltage	250 V	Published operating table; OperatingPoint1
Plate voltage	150 V	Published operating table; OperatingPoint1
Maximum altitude	80000 ft	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum neutron total dosage	10000000000000000 n/cm2	Radiation
Maximum neutron dose rate	10000000000000 n/cm2/s	Radiation

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	13 mA	Published operating table; OperatingPoint1
Plate current	6.5 mA	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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Nominal
Heater current	350 mA	Nominal
Maximum plate voltage	250 V	Promoted published value
Maximum plate dissipation	0.75 W	Promoted published value
DC PLATE VOLTAGE	250 V	MAXIMUM RATINGS -EACH SECTION
PEAK -PLATE FORWARD VOLTAGE	360 V	MAXIMUM RATINGS -EACH SECTION
PLATE DISSIPATION	0.75 W	MAXIMUM RATINGS -EACH SECTION
PLATE CURRENT	13 mA	MAXIMUM RATINGS -EACH SECTION
GRID CIRCUIT RESISTANCE	1 ohm	MAXIMUM RATINGS -EACH SECTION
BULB TEMPERATURE	250 C	MAXIMUM RATINGS -EACH SECTION
GRID VOLTAGE FOR $i_y =$	-9 V	CHARACTERISTICS -EACH SECTION
ALTITUDE -ABSOLUTE MAXIMUM	80000 mA	SPECIAL TESTS AND RATINGS

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	4000 uS	Promoted published value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	35	Promoted published value
'JMITSO F APPLIED VOLTAGE 5.5T	6.9 V	AVERAGE CHARACTERISTICS 6.3 VOLTS 350 mA
DC PLATE VOLTAGE	150 V	CHARACTERISTICS -EACH SECTION
PLATE CURRENT	6.5 mA	CHARACTERISTICS -EACH SECTION
AMPLIFICATION FACTOR 35	35 A	CHARACTERISTICS -EACH SECTION