

ELECTRONIC TUBE REFERENCE

6948

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
TRIODE-TRIODE

Subminiature high-mu twin triode designed specifically for guided-missile service, providing two general-purpose voltage-amplifier sections in rugged compact construction for military electronics.

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	0.00165 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	10 mA
MAXIMUM HEATER-CATHODE VOLTAGE	200 V
Published promoted fields populated from the datasheet; identical repeated sections compressed where applicable.	

SECTION2 Triode	
TRANSCONDUCTANCE	0.00165 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	10 mA
<i>Second physical triode section; electrically identical twin section.</i>	

THE 6948 IS A GENERAL PURPOSE HIGH-MU TWIN TRIODE IN THE 8 PIN SUBMINIATURE CONSTRUCTION. IT IS DESIGNED SPECIFICALLY FOR GUIDED MISSILE SERVICE. THIS TYPE IS CHARAC-



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	1650 μ S	—
Amplification Factor	70	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	250 V	—
Maximum Plate Dissipation	0.5 W	—



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
PeakPlateForwardVoltage	360 V	EachSection
Altitude	80000 ft	SpecialTest



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	0.5 W	Promoted published value
PEAK –PLATE FORWARD VOLTAGE	360 V	MAXIMUM RATINGS —EACH
PLATE DISSIPATION	0.5 W	MAXIMUM RATINGS —EACH
DC PLATE CURRENT	10 mA	MAXIMUM RATINGS —EACH
GRID CIRCUIT RESISTANCE	1 ohm	MAXIMUM RATINGS —EACH
DC GRID VOLTAGE FOR I b=	3.5 mA	CHARACTERISTICS —EACH SECTION
ALTITUDE– ABSOLUTE MAXIMUM	80000 mA	SPECIAL TESTS AND RATINGS

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1650 uS	Promoted published value
Amplification factor	70	Promoted published value
LIMITS OF APPLIED VOLTAGE 5.5 TO	6.9 V	AVERAGE CHARACTERISTICS 6.3 VOLTS 350 mA
DC PLATE VOLTAGE	100 V	CHARACTERISTICS —EACH SECTION
DC PLATE CURRENT	0.8 mA	CHARACTERISTICS —EACH SECTION
AMPLIFICATION FACTOR 70	70 A	CHARACTERISTICS —EACH SECTION