

ELECTRONIC TUBE REFERENCE

6968

Voltage Pentode - High Frequency (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Ruggedized miniature pentode designed for wideband high-frequency amplification and intermittent operation separated by long standby periods.

GENERAL CHARACTERISTICS

BASE DESIGNATION	78D	BASE PINS	7
NOMINAL HEATER	6.3 V / 175 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.005 S
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM SCREEN VOLTAGE	155 V
MAXIMUM PLATE DISSIPATION	1.65 W
MAXIMUM SCREEN DISSIPATION	0.55 W
MAXIMUM CATHODE CURRENT	20 mA
MAXIMUM HEATER-CATHODE VOLTAGE	135 V
Published promoted fields populated from the datasheet; identical repeated sections compressed where applicable.	

THE 6968 IS A WIDE-BAND HIGH-FREQUENCY AMPLIFIER IN THE 7 PIN MINIATURE CONSTRUCTION. THE DESIGN OF THE HEATER CATHODE PERMITS INTERMITT ENT OPERATION WITH LONG PERIODS



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 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid To Plate Capacitance	0.02 pF	Maximum
Input Capacitance	4 pF	—
Output Capacitance	2.85 pF	—



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Nominal
Heater current	175 mA	Nominal
Maximum plate voltage	200 V	Promoted published value
Maximum screen voltage	155 V	Promoted published value
Maximum plate dissipation	1.65 W	Promoted published value
Maximum screen dissipation	0.55 W	Promoted published value
Maximum cathode current	20 mA	Promoted published value
PLATE VOLTAGE	200 V	MAXIMUM RATINGS
GRID 2 VOLTAGE	155 V	MAXIMUM RATINGS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID 1 VOLTAGE, NEGATIVE, DC	50 V	MAXIMUM RATINGS
GRID1 VOLTAGE, POSITIVE, DC	0 V	MAXIMUM RATINGS
PLATE DISSIPATION	1.65 W	MAXIMUM RATINGS
CATHODE CURRENT, DC	20 mA	MAXIMUM RATINGS
GRID 1 CURRENT, DC	1 mA	MAXIMUM RATINGS
BULB TEMPERATURE AT HOTTEST POINT	165 C	MAXIMUM RATINGS
ALTITUDEA	60000 ft	MAXIMUM RATINGS
PLATE VOLTAGE	120 V	CLASS A AMPLIFIER
GRID 2 (SCREEN) VOLTAGE	120 V	CLASS A AMPLIFIER
GRID 1 (CONTROL-GRID) VOLTAGE —	2 V	CLASS A AMPLIFIER
PLATE CURRENT 5.0 7.5 it MA.	7.5 mA	CLASS A AMPLIFIER
GRID 2 CURRENT	4 mA	CLASS A AMPLIFIER
MAXIMUM PLATE CURRENT (Ec1 =-15.0 V)	100 mA	CHARACTERISTICS WITH EF=6.3 VOLTS,

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
THE 6968 IS A WIDE-BAND HIGH-FREQUENCY AMPLIFIER IN THE 7 PIN MINIATURE CONSTRUCTION.	7 A	—
PLATE VOLTAGE	150 V	CHARACTERISTICS WITH EF=6.3 VOLTS,