

ELECTRONIC TUBE REFERENCE

6BF7

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

General-purpose subminiature medium-mu double triode with separate cathode leads, intended for Class-A amplifier and related compact electronic applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8DG	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

8DG - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 2P	B	P – Plate (Anode)	CONNECTED
PIN2 – 2G1	B	G1 – Control Grid	CONNECTED
PIN3 – H	–	H – Heater	CONNECTED
PIN4 – 2K	B	K – Cathode	CONNECTED
PIN5 – 1K	A	K – Cathode	CONNECTED
PIN6 – H	–	H – Heater	CONNECTED
PIN7 – 1G1	A	G1 – Control Grid	CONNECTED
PIN8 – 1P	A	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	7000 Ω
TRANSCONDUCTANCE	0.0048 S
AMPLIFICATION FACTOR	35
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM HEATER-CATHODE VOLTAGE	90 V
<i>Published promoted fields populated semantically; identical repeated sections compressed where applicable.</i>	

SECTION2 Triode	
PLATE RESISTANCE	7000 Ω
TRANSCONDUCTANCE	0.0048 S
AMPLIFICATION FACTOR	35
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.5 W
<i>Physical triode restored under current one-row-per-physical-section policy.</i>	

General-purpose subminiature double triode with separate cathode leads.

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
Plate voltage	100 V	ClassA; OperatingPoint1
Cathode resistor	100 ohm	ClassA; OperatingPoint1
Plate current	8 mA	ClassA; OperatingPoint1
Plate resistance	7000 ohm	ClassA; OperatingPoint1
Transconductance	4800 uS	ClassA; OperatingPoint1
Amplification factor	35	ClassA; OperatingPoint1

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	2 pF	—
Output capacitance	1.6 pF	Section1
Grid-to-plate capacitance	1.5 pF	—

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification Factor	35	Typical
Transconductance	4800 μ S	Typical



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1966 Tung Sol Electronic Tubes 1 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID TO PLATE (EACH SECTION)	5 μ f	Capacitances GRID TO PLATE (EACH SECTION) 1.5 1..5 μ f

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID TO GRID	0.009 μ f	Section 2 GRID TO GRID 0.008 0.009 μ f
PLATE TO PLATE	0.75 μ f	Section 2 PLATE TO PLATE 0.55 0.75 μ f

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HEATER VOLTAGE	6.3 V	Maximum Ratings HEATER VOLTAGE 6.3 VOLTS
MAXIMUM HEATER –CATHODE VOLTAGE	90 V	Maximum Ratings MAXIMUM HEATER — CATHODE VOLTAGE 90 VOLTS
MAXIMUM PLATE DISSIPATION (EACH SECTION)	1 W	Maximum Ratings MAXIMUM PLATE DISSIPATION (EACH SECTION) 1.0 WATT
HEATER VOLTAGE	6.3 V	Typical Operating Conditions HEATER VOLTAGE 6.3 voLTs
HEATER CURRENT 0	3 A	Typical Operating Conditions HEATER CURRENT 0.3 AMP.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID VOLTAGE FOR	7.5 V	Typical Operating Conditions GRID VOLTAGE FOR 10 μAMP. PLATE CURRENT —7.5 voLTs