

ELECTRONIC TUBE REFERENCE

6BK4

Triode - HV Shunt Regulator electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

High-voltage triode designed for electronic voltage-regulator service, controlling or shunting current to stabilize demanding power supplies.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8GC	BASE PINS	8
NOMINAL HEATER	6.3 V / 200 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

8GC - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – K	A	K – Cathode	CONNECTED
PIN2 – H	–	H – Heater	CONNECTED
PIN3 – IC	–	–	IC
PIN4 – IC	–	–	IC
PIN5 – G1	A	G1 – Control Grid	CONNECTED
PIN6 – IC	–	–	IC
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – IC	–	–	IC
CAP1 – P	A	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.0002 S
AMPLIFICATION FACTOR	2000
MAXIMUM PLATE VOLTAGE	27000 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM CATHODE CURRENT	6 mA
<i>High-voltage shunt-regulator beam triode.</i>	

Sharp-cutoff beam triode for high-voltage shunt-regulator service in color television receivers.



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Unregulated DC Supply Voltage	55000 V	VoltageControl
GridVoltageDC	-125 V	VoltageControl



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
Unregulated DC Supply Voltage Maximum	60000 V	ShuntVoltageRegulator
Regulated DC Output Voltage	25000 V	LoadCurrent=0mA
UnregulatedSupplyVoltageTypical	36000 V	ShuntVoltageRegulator



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
Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID TO PLATE	0.03 pF	Capacitances GRID TO PLATE 0.03 pf
GRID TO CATHODE AND HEATER	2.6 pF	Capacitances GRID TO CATHODE AND HEATER 2.6 pf
PLATE TO CATHODE AND HEATER	1 pF	Capacitances PLATE TO CATHODE AND HEATER 1.0 pf

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MAXIMUM DC PLATE VOLTAGE	0 V	Maximum Ratings MAXIMUM DC PLATE VOLTAGE 6E 27 000 VOLTS
MAXIMUM DC PLATE CURRENT j	6 mA	Maximum Ratings MAXIMUM DC PLATE CURRENT j.6 MA.
MAXIMUM PLATE DISSIPATION	2.5 W	Maximum Ratings MAXIMUM PLATE DISSIPATION 2.5 WATTS
MAXIMUM GRID CIRCUIT RESISTANCE A	3 Mohm	Maximum Ratings MAXIMUM GRID CIRCUIT RESISTANCE A 3 MEGOHMS
DC VOLTAGE ~	0 V	Typical Operating Conditions DC VOLTAGE ~ 36 000 voLTs
EQUIVALENT RESISTANCE	11 Mohm	Typical Operating Conditions EQUIVALENT RESISTANCE 11 MEGOHMS
FOR LOAD CURRENT OF p MA	0 V	Typical Operating Conditions FOR LOAD CURRENT OF p MA. 25 000 voLTs
FOR LOAD CURRENT OF	1 mA	Typical Operating Conditions FOR LOAD CURRENT OF 1 MA. 2u 500 voLTs
FOR LOAD CURRENT OF	500 V	Typical Operating Conditions FOR LOAD CURRENT OF 1 MA. 2u 500 voLTs