

ELECTRONIC TUBE REFERENCE

5977

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Ruggedized long-life subminiature medium-mu triode for control circuits requiring stable performance under severe shock and vibration.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8DK	BASE PINS	8
NOMINAL HEATER	6.3 V / 150 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

8DK - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	4100 Ω
TRANSCONDUCTANCE	0.0045 S
AMPLIFICATION FACTOR	16
MAXIMUM PLATE VOLTAGE	190 V
MAXIMUM PLATE DISSIPATION	3.3 W
MAXIMUM CATHODE CURRENT	22 mA
MAXIMUM HEATER-CATHODE VOLTAGE	200 V
<i>Medium-mu triode; Class A characteristics and capacitances published.</i>	

The 5977 is a T-3 subminiature medium-mu triode designed for control circuits where long life and stable performance are important, with rugged construction for severe shock and vibration.



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
Heater Voltages 6.0 6.3 6.6V	6.6 V	Heater Voltages 6.0 6.3 6.6V
Heater Current e 150 mA	150 mA	Heater Current e 150 mA
Output L. 2.2 0.8 uuf T3	0.8 pF	Output L. 2.2 0.8 uuf T3
Plate Dissipation . . . e 3.3 W	3.3 W	Plate Dissipation . . . e 3.3 W
the heater voltage to its center rated value of 6.3 volts.	6.3 V	the heater voltage to its center rated value of 6.3 volts.
Plate Voltage 100Vd Cathode Resistor MIL-E-1 Par. 3.2.2.1 270 Ohms	270 Ohms	Plate Voltage 100Vd Cathode Resistor MIL-E-1 Par. 3.2.2.1 270 Ohms
4.10.8 Heater Current:. Q.65 140 — — — 160 mA	160 mA	4.10.8 Heater Current:. . . Q.65 140 — — — 160 mA
Heater Current.. . .t it — 2 5 138 164 mA	164 mA	Heater Current.. . .t it — 2 5 138 164 mA



SOURCE OPERATING CONDITIONS

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195X General Electric Essential Characteristics

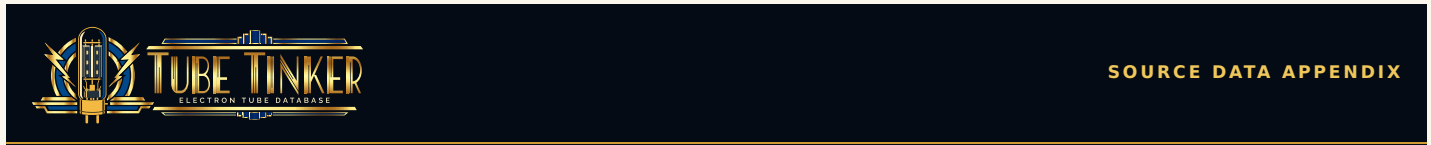
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195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input Capacitance	2 pF	—
Output Capacitance	2.2 pF	—
Grid-to-Plate Capacitance	1.3 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	100 V	ClassA
Cathode Resistor	270 ohm	ClassA
Plate Current	10 mA	ClassA



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.3 pF	WholeTube
Input capacitance	2 pF	WholeTube
Output capacitance	0.8 pF	WholeTube

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	190 V	WholeTube
Maximum plate dissipation	3.3 W	WholeTube
Maximum plate current	22 mA	WholeTube
Maximum peak grid current	4.4 mA	WholeTube
Maximum heater-cathode voltage	200 V	WholeTube

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	ClassA
Cathode resistor	270 ohm	ClassA
Plate current	10 mA	ClassA
Amplification factor	16	ClassA
Plate resistance	4100 ohm	ClassA
Transconductance	4500 uS	ClassA