

MECHANICAL DATA

Envelope	Metal Capsule
Base	Octal Plug
Cathode	Unipotential Oxide
Magnetic Field Strength	400 Gauss
Length of Magnetic Field	14" Uniform
Mounting Position	Any
Weight, approx. ³	2 Lbs.
Connectors	BNC with UG89U
Focusing Field	Electromagnet ³
Cooling	Convection Air ¹
Maximum Collector Temperature	200° C

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage ($\pm 10\%$)	6.3 Volts a c
Heater Current	1.0 Ampere

RATINGS (Absolute Values)

Gating Electrode	-100 Volts to +15	Max.
1st Anode Voltage	500 Volts	Max.
Helix Voltage	600 Volts	Max.
Helix Current	2 Ma	Max.
Collector Voltage	750 Volts	Max.
Collector Dissipation	1.5 Watts	Max.
Helix Voltage to Ground	750 Volts	Max.
Cathode Current	3.5 Ma	Max.

CHARACTERISTICS

Frequency Band	1.9 Kmc to 4.1 Kmc	Max.
Cold Transmission Loss	50 db	Max.

TYPICAL OPERATION²

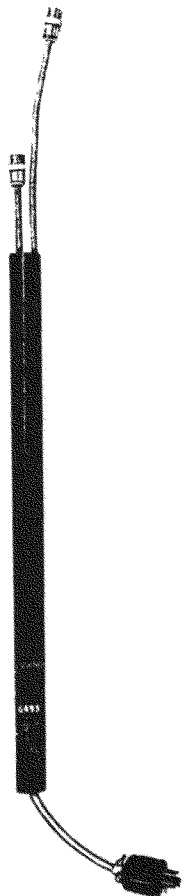
Frequency	3 Kmc
Gating Electrode	0 Volts
	(-70 V for Cutoff)
1st Anode Voltage	350 Volts
1st Anode Current	< 500 μ a
Helix Voltage	400 Volts
Helix Current	500 μ a
Collector Voltage	550 Volts
Collector Current	2.5 Ma
Power Output	15 Mw
Gain	> 35 db
Operating Band to 3 db Power Points	2.1 to 3.9 Kmc
Noise Figure at Operating Band Width	< 25 db

NOTES:

1. Provided that the solenoid ID permits air circulation and that the temperature inside the solenoid is less than 50° C over the ambient.
2. Voltages given with respect to cathode. Any one element may be operated at capsule potential which should be ground.
3. Magnet not included, information on request.

QUICK REFERENCE DATA

The Sylvania Type 6493 is a low power broad-band TWT Amplifier with 15 Mw power over the 2000 to 4000 megacycle frequency range.



SYLVANIA ELECTRIC PRODUCTS INC.

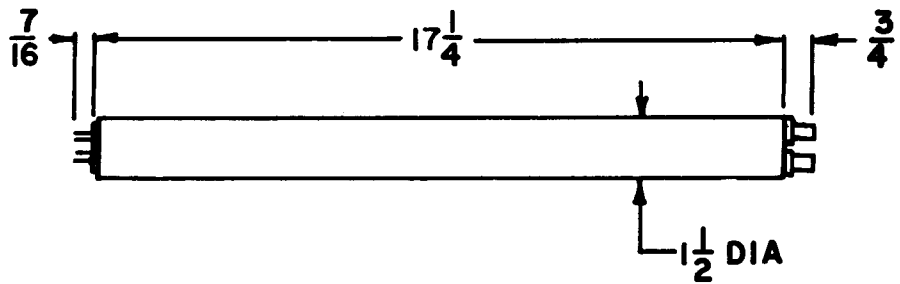
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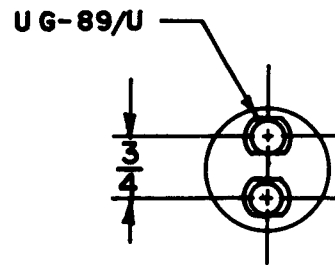
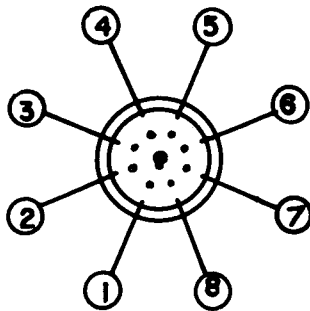
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OUTLINE DRAWING



8 PIN BASE



- 1 2ND ANODE-HELIX
- 2 COLLECTOR
- 3 HEATER-CATHODE
- 4 1ST ANODE

- 5 GRID
- 6 HEATER
- 7 GETTER
- 8 CAPSULE