

MECHANICAL DATA

Envelope	Metal Capsule
Base	Special (Socket Supplied)
Cathode	Unipotential Oxide
Magnetic Field Strength	500 Gauss
Length of Magnetic Field	10" Uniform
Mounting Position	Any
Weight ¹	2 Lbs. Approx.
Connectors	BNC (52 Ohm)
Focusing Field ¹	Electromagnet
Cooling	Forced Air
Maximum Collector Temperature	150° C
Maximum Bulb Temperature	150° C

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage ($\pm 10\%$)	6.3 Volts a c
Heater Current	3.5 Amperes

RATINGS (Absolute Values)

1st Anode Voltage	150 Volts	Max.
1st Anode Current	5 Ma	Max.
2nd Anode Voltage	Ext. Connect to Helix	Max.
2nd Anode Current	5 Ma	Max.
Helix Voltage	2000 Volts	Max.
Helix Dissipation	15 Watts	Max.
Collector Voltage	2100 Volts	Max.
Collector Dissipation	60 Watts	Max.
Focusing Electrode Voltage	-15 Volts to +5 Volts	
Helix Voltage to Ground	0	Max.

CHARACTERISTICS

Frequency	2-4 Kmc
Power Output	35 Mw Min.

TYPICAL OPERATION

	2.0 Kmc	4 Kmc
1st Anode Voltage	80	60 Volts
1st Anode Current	0.75	0.15 Ma
2nd Anode Voltage	180	1250 Volts
2nd Anode Current	0.4	1.5 Ma
Helix Voltage	180	1250 Volts
Helix Current	0.5	3 Ma
Collector Voltage	260	1330 Volts
Collector Current	18	15 Ma
Power Output	50	300 Mw

NOTE:

1. Magnet not included, information on request.

QUICK REFERENCE DATA

The Sylvania Type 6496 is a Backward Wave Oscillator designed for voltage tunable oscillator service over the frequency range 2000-4000 megacycles with a power output of 35-300 Mw.



**SYLVANIA ELECTRIC
PRODUCTS INC.**

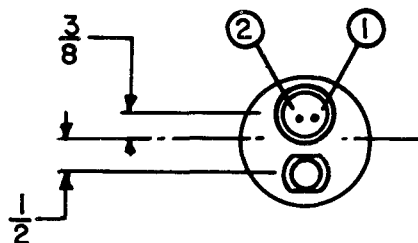
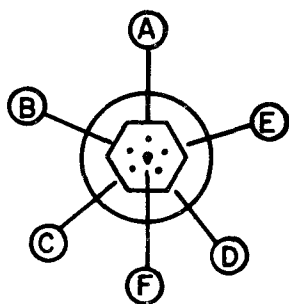
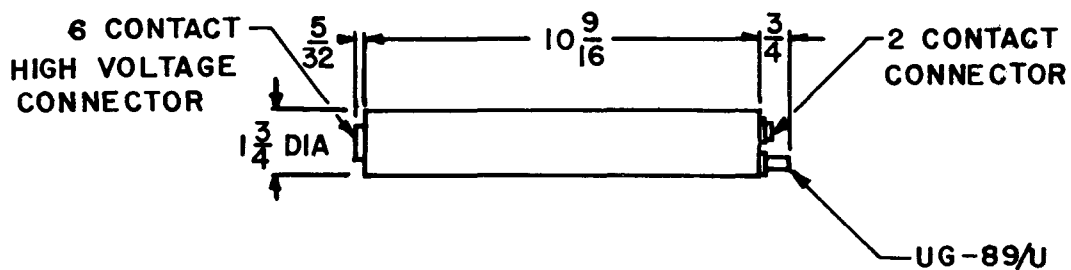
**ELECTRONICS DIVISION
WOBBURN, MASS.**

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OUTLINE DRAWING



- A FOCUS
- B CAPSULE
- C HEATER
- D HEATER-CATHODE
- E ANODE
- F 2ND ANODE

- 1 HELIX
- 2 COLLECTOR