

MECHANICAL DATA

Envelope	Metal Capsule
Base	6 Prong Amp AN Type
Cathode	Philips Impregnated
Magnetic Field Strength	700 Gauss
Length of Magnetic Field	14" Uniform
Mounting Position	Any
Weight, approx. ¹	1 Lb.
Connectors	BNC with 50 Ohm Coax Cable
Focusing Field ¹	Electromagnet
Cooling ²	Convection Air
Maximum Collector Temperature	200° C

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage ($\pm 10\%$)	8.0 Volts a c
Heater Current	0.8 Amperes

RATINGS (Absolute Values)

Heater-Cathode Voltage	10 Volts	Max.
1st Anode Voltage	800 Volts	Max.
Helix Voltage	1000 Volts	Max.
Helix Current	10 Ma	Max.
Collector Voltage	1000 Volts	Max.
Collector Dissipation	40 Watts	Max.
Focusing Electrode Voltage	-25 Volts to +25 Volts	Max.
Helix Voltage to Ground	1000 Volts	Max.

CHARACTERISTICS

Frequency	2.0 Kmc Min. to 4.0 Kmc	Max.
Cold Transmission Loss	40 db	Min.

TYPICAL OPERATION³

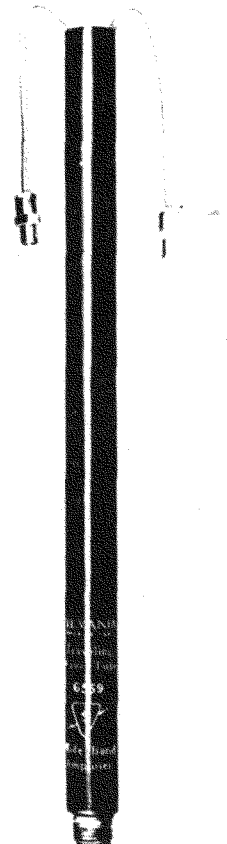
Frequency	3000 Mc
1st Anode Voltage	510 Volts
1st Anode Current	0 Ma
Helix Voltage	800 Volts
Helix Current	2 Ma
Collector Voltage	850 Volts
Collector Current	20 Ma
Power Output	1 Watt
Operating Band to 3 db Power Points	2.1 to 3.9 Kmc
Gain	> 25 db
Noise Figure at Operating Band Width	< 30 db

NOTES:

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

QUICK REFERENCE DATA

The Sylvania Type 6559 is a traveling wave tube designed for cw or pulsed amplifier service over the frequency range 2000-4000 megacycles. Power output is approximately 1 watt.



SYLVANIA ELECTRIC
PRODUCTS INC.

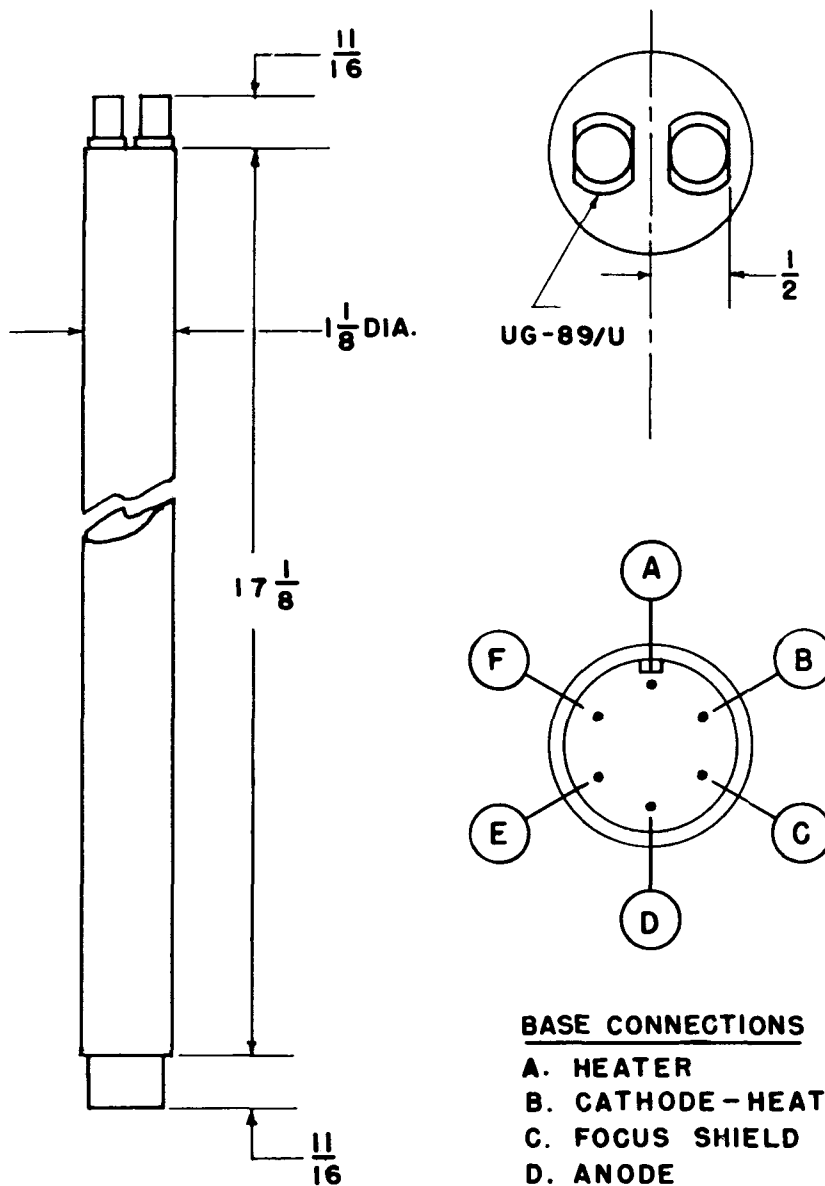
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OUTLINE DRAWING



BASE CONNECTIONS

- A. HEATER
- B. CATHODE - HEATER
- C. FOCUS SHIELD
- D. ANODE
- E. HELIX
- F. COLLECTOR