

# NEW DATA

## 6169

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### RUGGEDIZED SUB-MINIATURE U.H.F. TRIODE

**APPLICATION:**

The 6169 is a T-3 subminiature triode designed for rugged applications as encountered in the military service. It is primarily intended for use in U.H.F. mixer, amplifier or pulse service. The frequency limit as an oscillator is above 800 megacycles. Elements carrying R.F. have double leads to reduce lead inductance and resistance. This is the equivalent to a single section of a 7F8 loctal.

**RATINGS:**

Heater Voltage (AC or DC) ±10%	6.3	volts
Maximum Plate Voltage	250	volts
Maximum Heater to Cathode Voltage	100	volts
Maximum Plate Dissipation	3.0	watts
Maximum Cathode Current	15	ma
Maximum impact	500	g
Maximum vibration output *	50	mv
Maximum bulb temperature	200°	c

**INTERELECTRODE CAPACITANCES:**

	UNSHIELDED	* SHIELDED
Grid to Plate	1.7	1.6 $\mu\mu\text{f}$
Input	2.1	2.5 $\mu\mu\text{f}$
Output	.75	2.6 $\mu\mu\text{f}$

\*With close fitting shield connected to cathode

**TYPICAL CONDITION OF OPERATION:**

Heater Voltage	6.3		volts
Heater Current	150		ma
Plate Voltage	180	120	90 volts
Grid Voltage	-1	-.75	-.50 volts
Plate Current	11.5	6.0	4.5 ma
Grid Voltage for 10 $\mu\text{amp}$ , Plate Current (approx.)	-7	—	— volts
Plate Resistance	8500	8300	9000 ohms
Transconductance	6500	6000	5800 $\mu\text{mhos}$
Amplification Factor	55	50	50

NOTE: LEADS MAY BE CUT TO .200" FOR USE IN CINCH SOCKET  
54A-13686

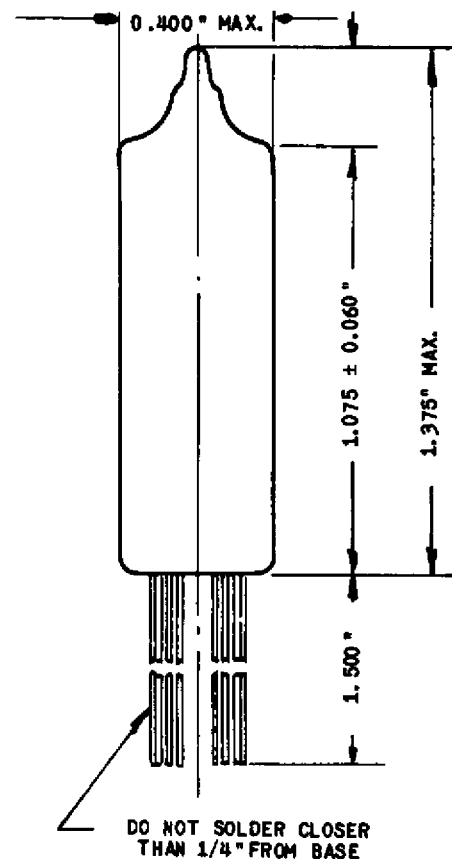
\* Measured across a 10,000 ohms load. Resistor when vibrated at 25 cps at .080" excursion.

**PHYSICAL SPECIFICATIONS**

Style.....	Sub Miniature
Bulb.....	T-3-1
Mounting Position.....	Any
Leads.....	Flexible
Basing Diagram.....	8EE
Base.....	KB-1

**BASE PIN CONNECTIONS**

PIN 1	Grid
PIN 2	Plate
PIN 3	Heater
PIN 4	Cathode
PIN 5	Cathode
PIN 6	Heater
PIN 7	Plate
PIN 8	Grid



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## RESEARCH DIVISION

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