

# NEW NATIONAL UNION ELECTRON TUBE DATA

## N.U. 6193

6193

### RUGGEDIZED SUBMINIATURE TWIN-TRIODE

**APPLICATION:**

The NU-6193 is a T-3 subminiature twin-triode designed for reliable as well as rugged applications as encountered in the military service. It is primarily intended for use as a mixer, amplifier, multivibrator. This is the equivalent to a 7F8 except for dissipation limits.

**RATINGS:**

Heater Voltage (AC or DC) $\pm 10\%$	6.3 volts
Maximum Plate Voltage	250 volts
Maximum Heater to Cathode Voltage	100 volts
Maximum Plate Dissipation (per section)	2.0 watts
Maximum Cathode Current (per section)	15 ma
Maximum impact	500 g
Maximum vibration output $\bullet$	30 mv
Maximum bulb temperature	200° C

**INTERELECTRODE CAPACITANCES:**

	SHIELDED	UNSHIELDED
Grid to Plate	1.46 $\mu\text{mf}$	1.52 $\mu\text{mf}$
Input	2.75 $\mu\text{mf}$	2.60 $\mu\text{mf}$
Output	2.20 $\mu\text{mf}$	1.07 $\mu\text{mf}$

**TYPICAL CONDITION OF OPERATION: ■**

Heater Voltage	6.3		volts
Heater Current	300		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.
- All values are for a single section except for Heater Ratings.

from RTMA release #1107, July 24, 1952

JUNE 1952

Research Division

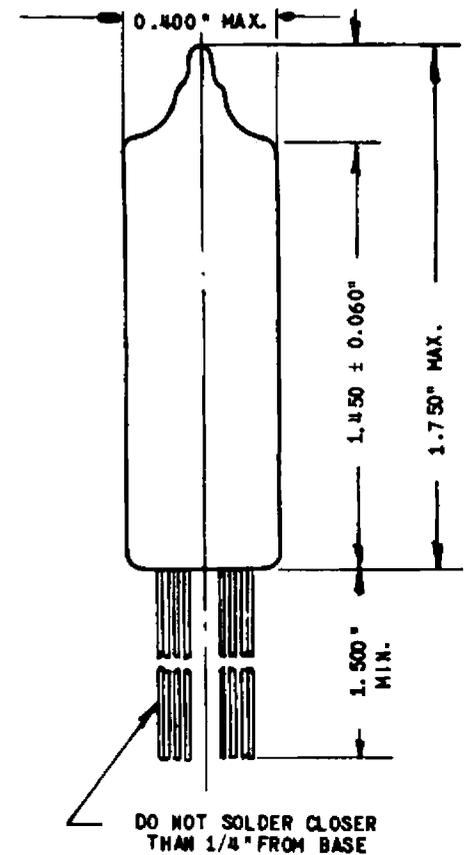
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**PHYSICAL SPECIFICATIONS**

Style..... Sub Miniature  
 Bulb..... T-3-3  
 Mounting Position..... Any  
 Leads..... Flexible  
 Basing Diagram..... 8D6  
 Base..... K8-1

**BASE PIN CONNECTIONS**

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



# NATIONAL UNION RADIO CORPORATION

## RESEARCH DIVISION

NU-6193 TWIN TRIODE

