

## S-Band Low Noise Traveling Wave Tube

LD-570

**NEC**

## Tentative Data Sheet

The LD-570 is suitable for a microwave preamplifier stage where low noise figure is required. The LD-570 has a maximum noise figure of 6.5 db and a minimum small signal gain of 20 db, and is used over the frequency band of 2,700 to 2,900 Mc/s without readjustment of tuning devices. Application of this tube include radar receivers, electronic counter-measure equipment, microwave relay systems and so on.

## General Characteristics:

Electrical

Heater Voltage .....	4 to 7 V
Heater Current .....	0.7 A Max.
Frequency Range .....	2,700 to 2,900 Mc/s
Noise Figure .....	6.5 db Max.
Small Signal Gain .....	20 db Min.
Input and Output VSWR .....	2.0 Max.

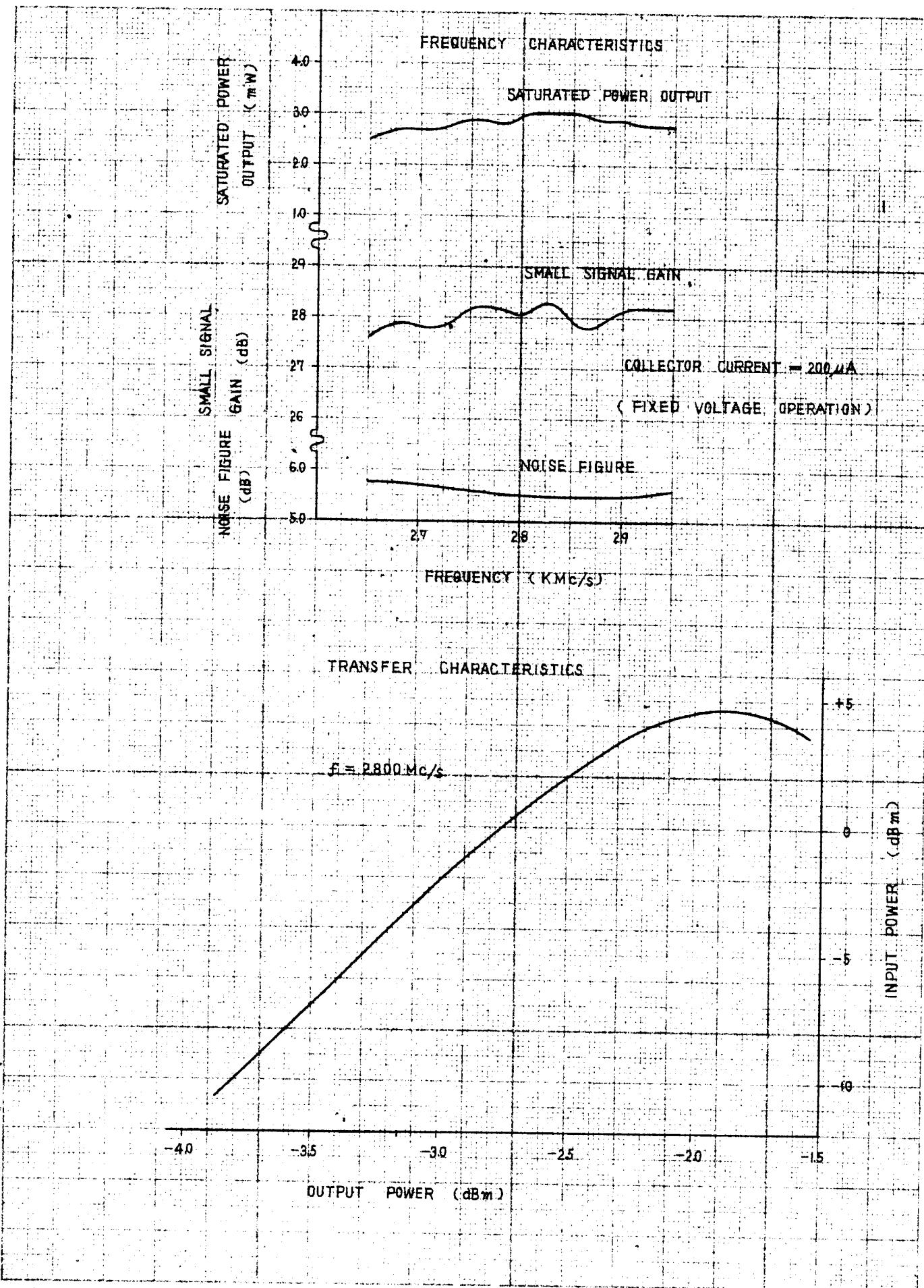
Mechanical

Mounting Position .....	Any
RF Connection .....	Coaxial Connector, Type N Plugs (UG-21D/U)
Socket .....	Octal base
Collector Connector .....	Special size
Dimension .....	See Outline Drawing
Weight .....	1K grs.
Cooling .....	Natural

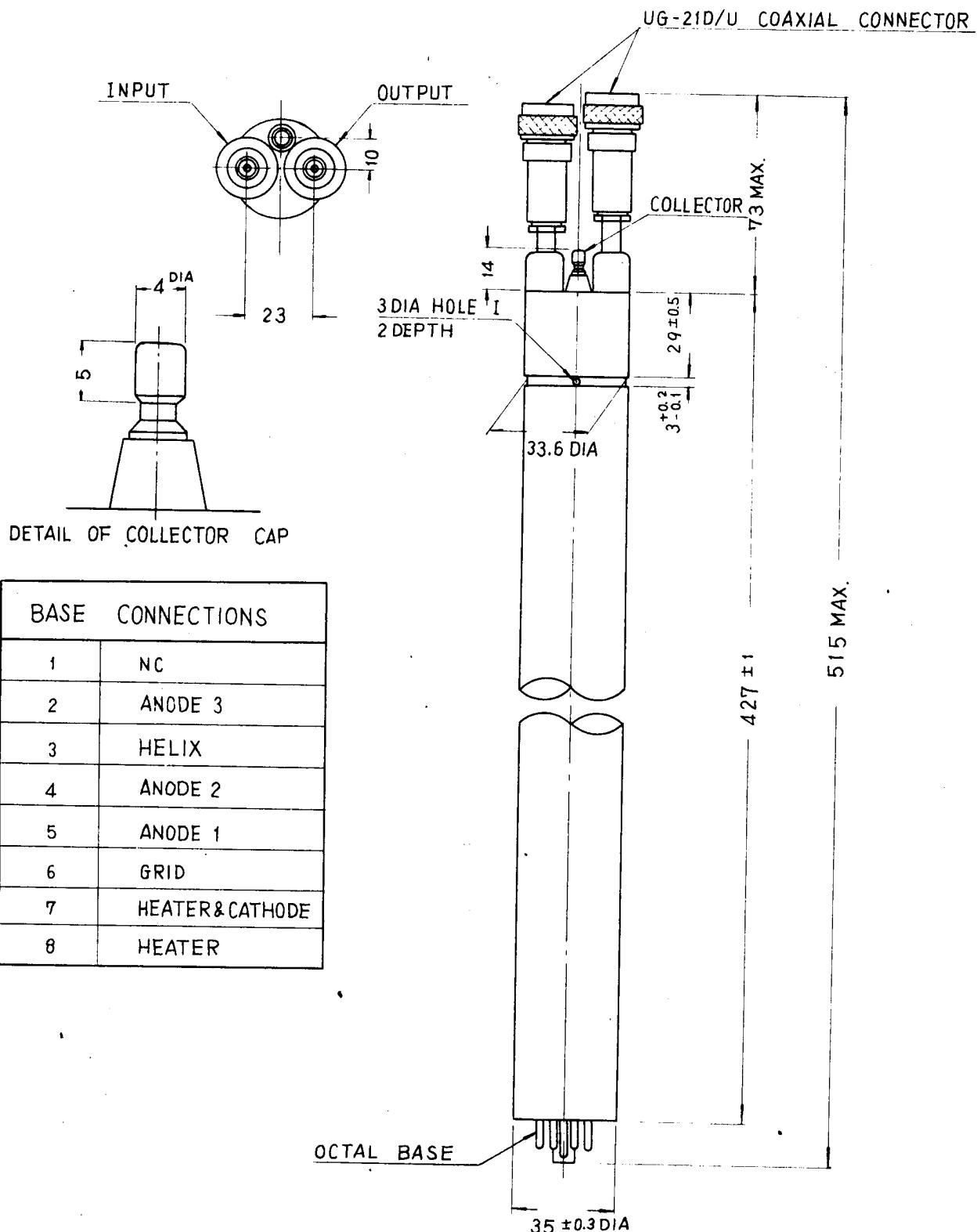
Typical Operation

Frequency .....	2,800 Mc/s
Heater Voltage .....	5.7 V
Heater Current .....	0.43 A
Grid Voltage .....	0 V
Anode 1 Voltage .....	19.7 V
Anode 2 Voltage .....	41 V
Anode 3 Voltage .....	330 V
Anode 1, 2 & 3 Current .....	0 $\mu$ A
Helix Voltage .....	437 V
Helix Current .....	0.1 $\mu$ A
Collector Voltage .....	700 V
Collector Current .....	200 $\mu$ A
Magnetic Field Strength .....	650 gauss
Noise Figure .....	5.5 db
Small Signal Gain .....	28 db
Saturated Power Output .....	3 mW

TYPICAL OPERATION OF LD-570



OUTLINE OF LD - 570



NOTE : DIMENSIONS ARE IN MILLIMETERS.



TP-42785