

S-Band Low Noise Traveling Wave Tube

NEC

LD-570

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.

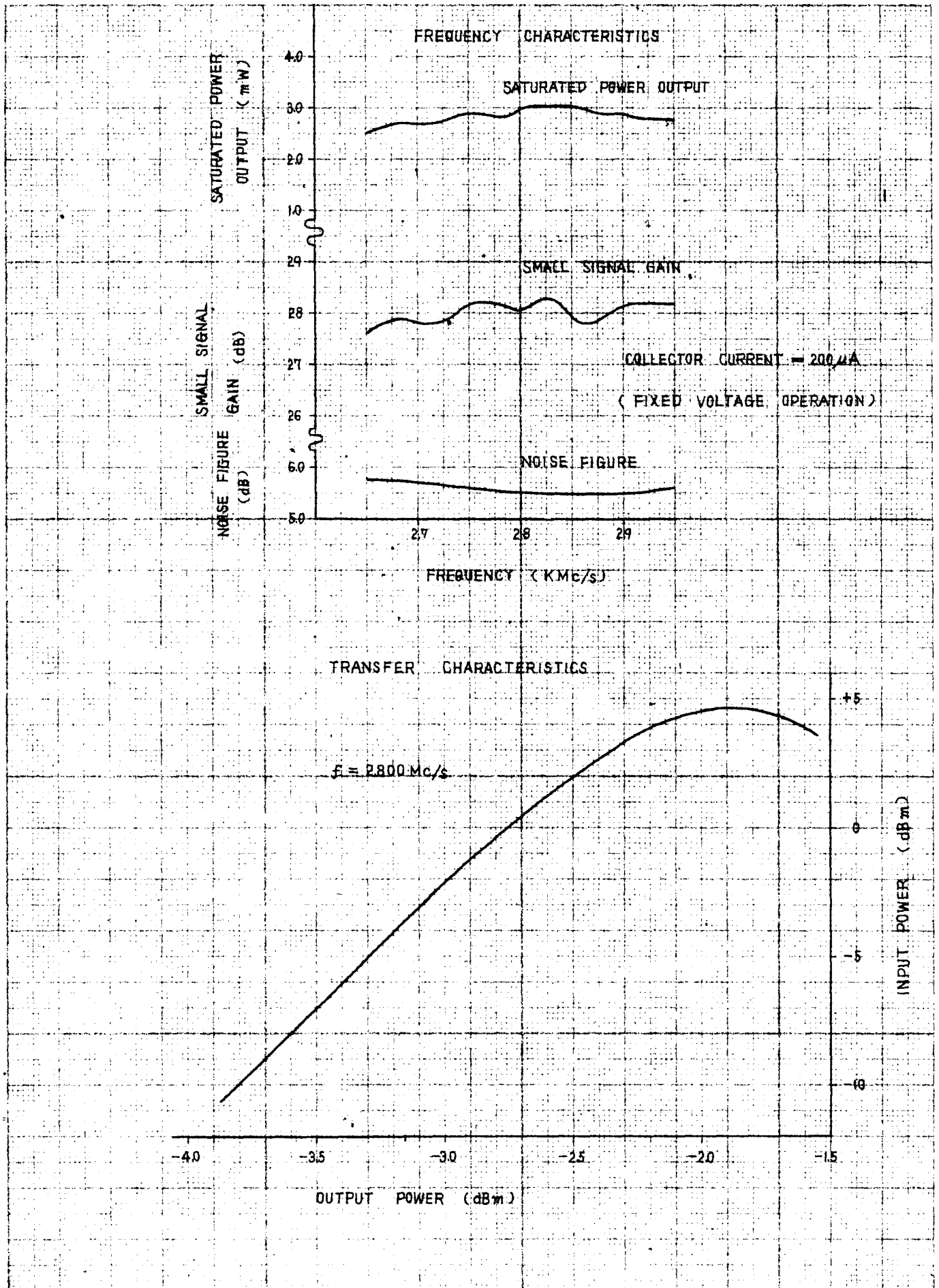
Mechanical

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

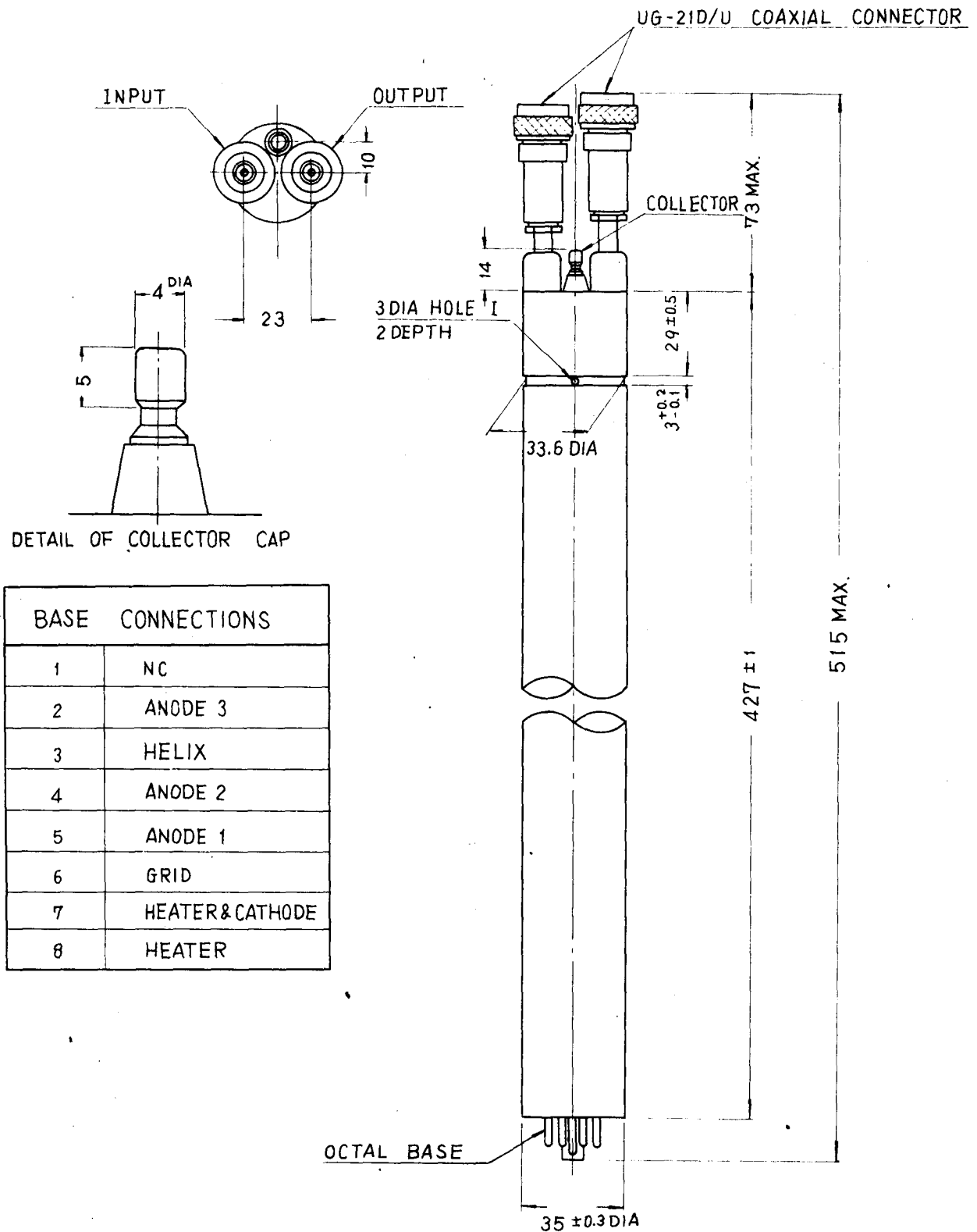
Typical Operation

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 μ A
Helix Voltage	437 V
Helix Current	0.1 μ A
Collector Voltage	700 V
Collector Current	200 μ 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