

X-Band Low Noise Traveling Wave Tube

LD-571/(9W90)

(Tentative Data Sheet)

NEC

The LD-571 is suitable for a microwave preamplifier stage where low noise figure is required. The LD-571 has a maximum noise figure of 8.5 db and a minimum small signal gain of 20 db, and is used over the frequency band of 8,950 to 9,200 Mc/s without readjustment of tuning devices. Application of this tube include radar receivers, electrical counter-measure equipments, microwave relay systems and so on.

The special tube which operates over the expanded frequency band of 8,500 to 9,500 Mc/s is also available on request.

General CharacteristicsElectrical

Heater Voltage	4 to 7 V
Heater Current	0.7 A
Frequency range	8,950 to 9,200 Mc/s
Noise Figure	8.5 db Max.
Small Signal Gain	20 db Min.
Input and Output VSWR	2.0 Max.

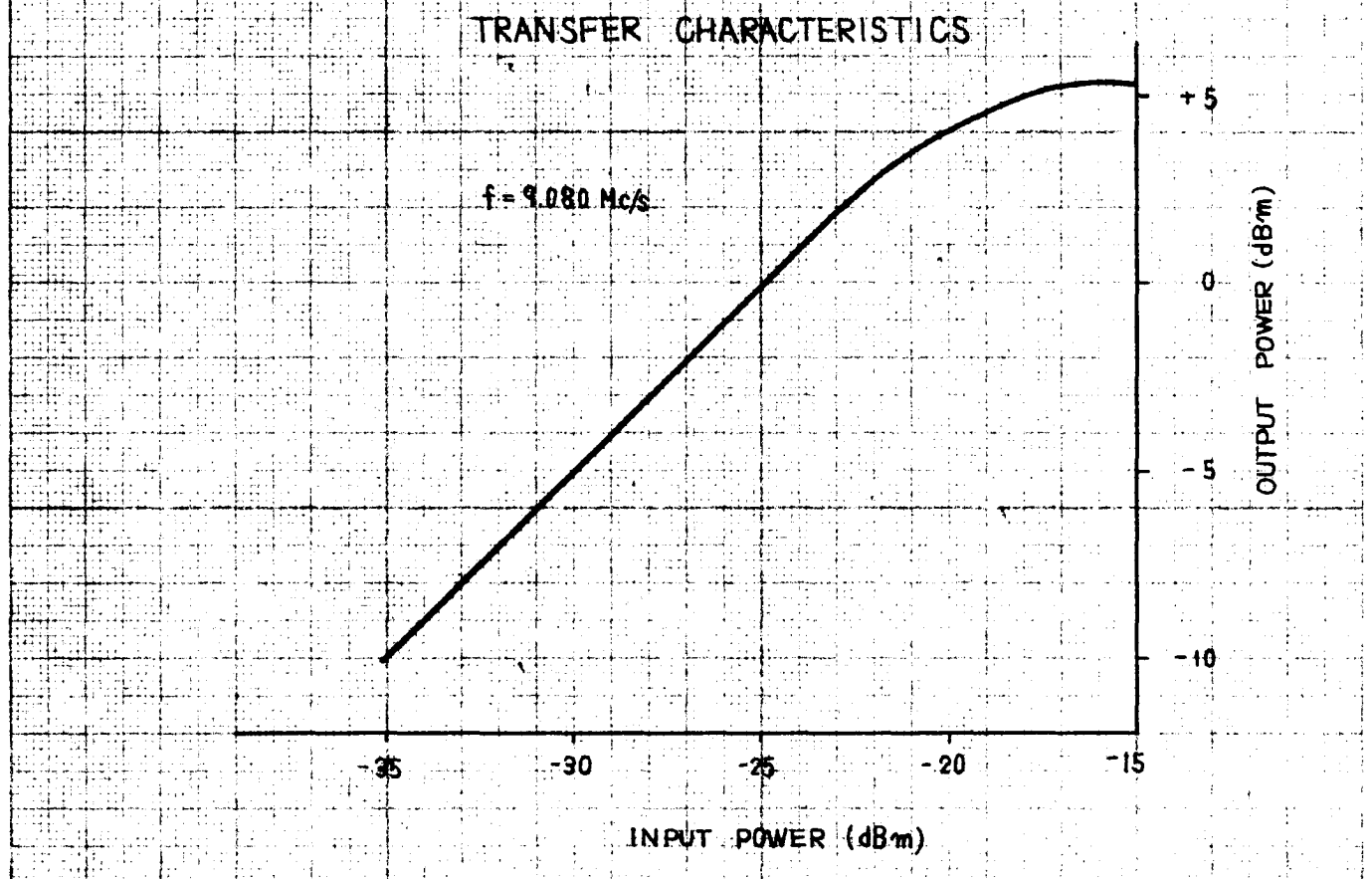
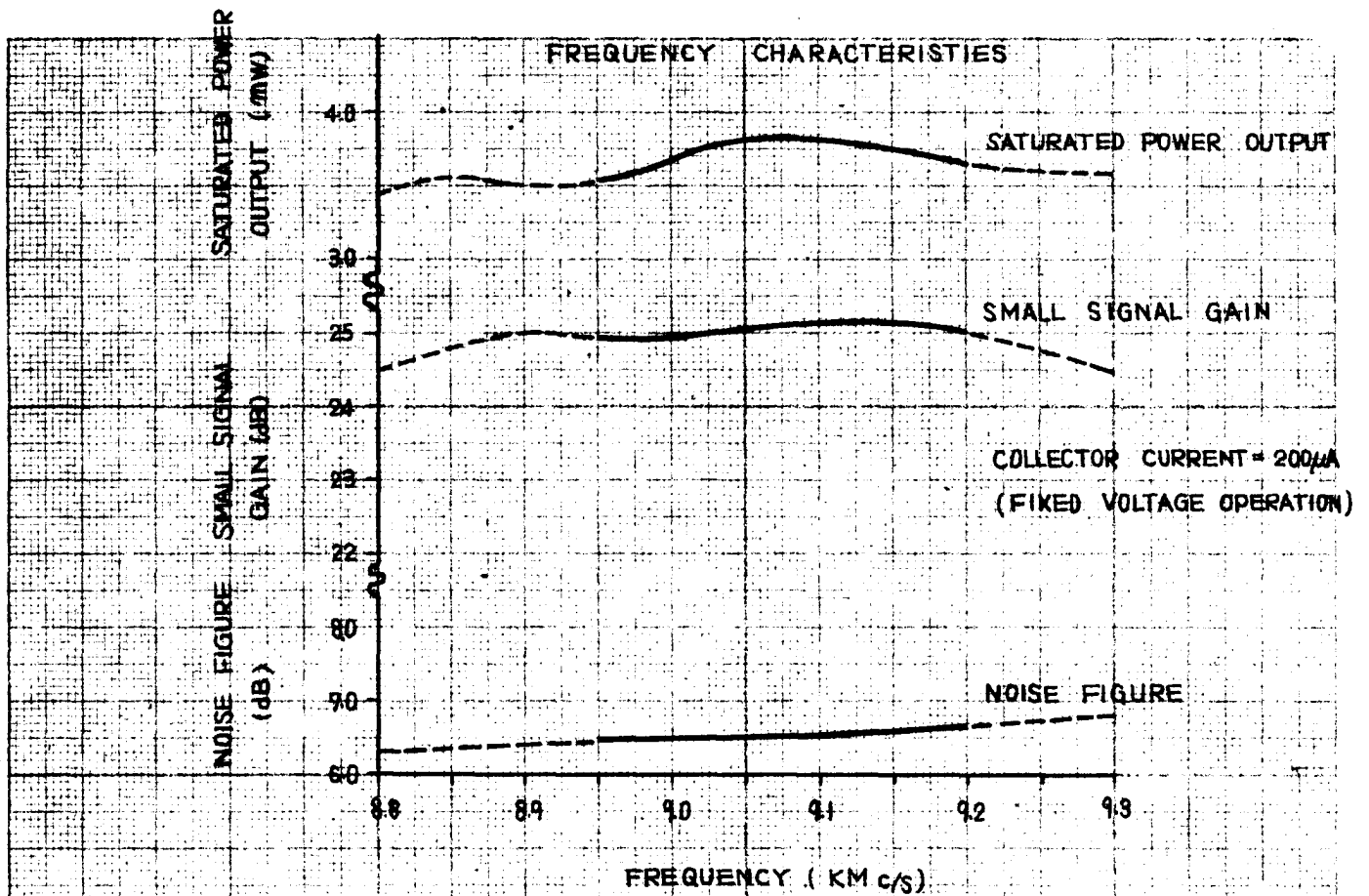
Mechanical

Mounting Position	Any
RF Connection	Reduced Height of RG-52/U Special flange
Socket	Octal base
Collector Connector	Special size
Dimension	See Outline Drawing
Weight	800 grs.
Cooling	Natural

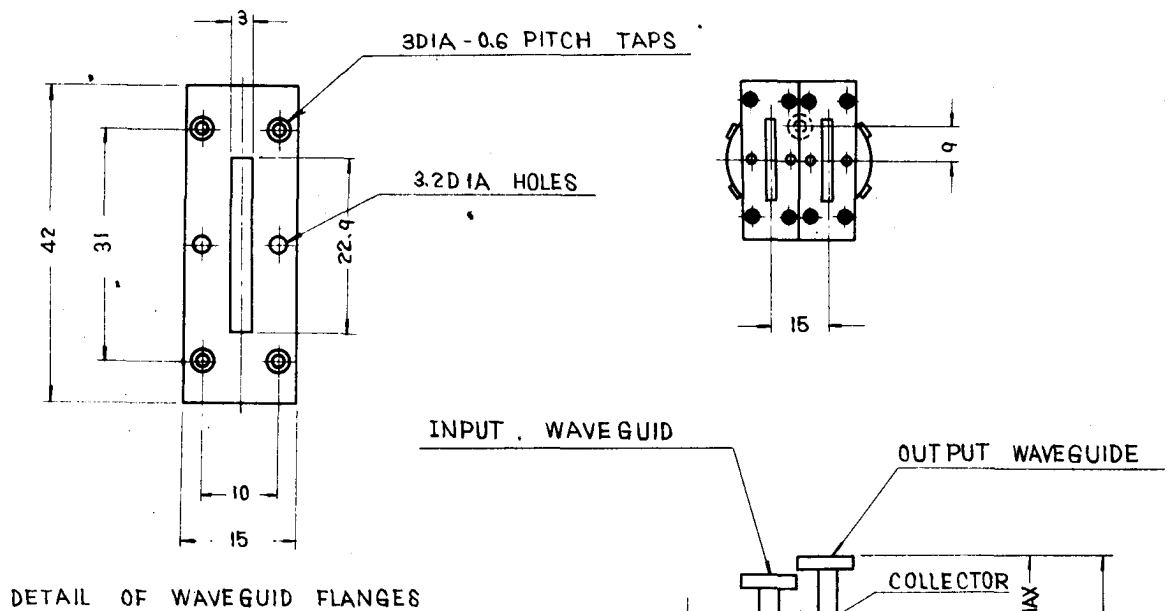
Typical Operation

Frequency	9,080 Mc/s
Heater Voltage	6.0 V
Heater Current	0.50 A
Grid Voltage	-5.0 V
Anode 1 Voltage	22.2 V
Anode 2 Voltage	115 V
Anode 3 Voltage	550 V
Helix Voltage	880 V
Helix Current	0.3 μ A
Collector Voltage	1200 V
Collector Current	200 μ A
Magnetic Field Strength	800 Gauss
Noise Figure	6.5 db
Small Signal Gain	25 db
Saturated Power Output	3.8 mW

TYPICAL OPERATION OF LD-571

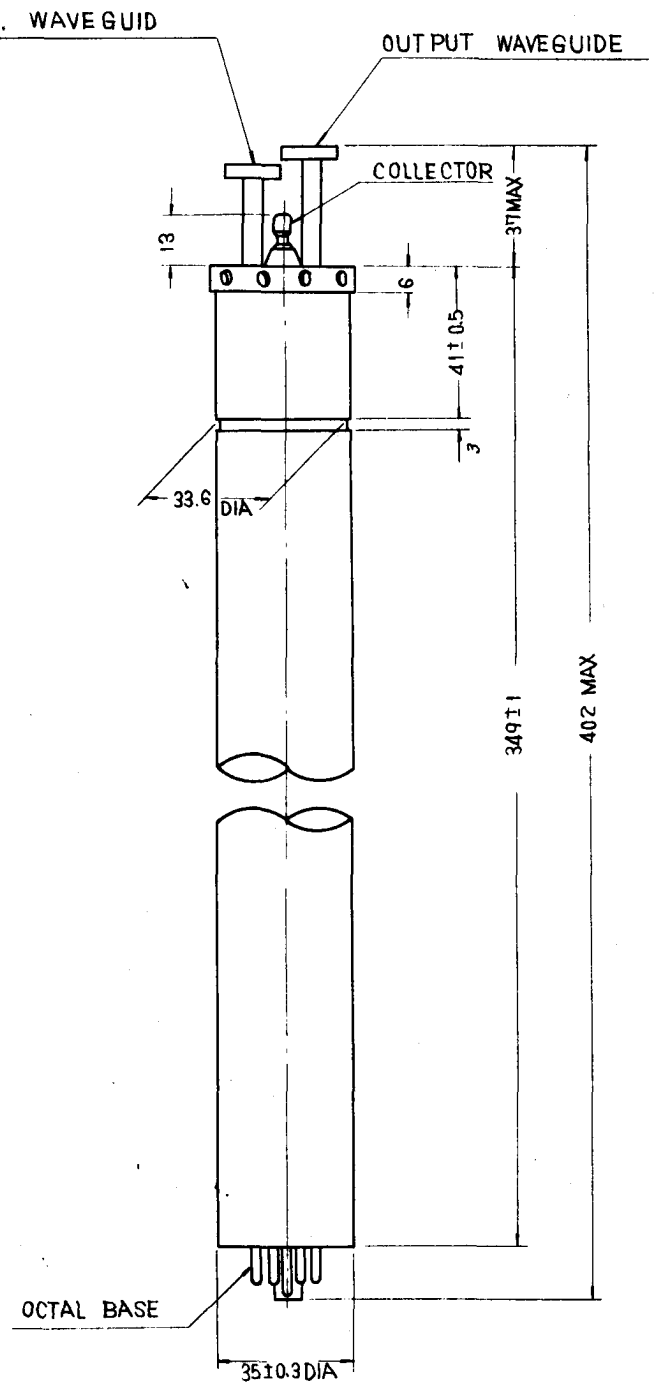


OUTLINE OF LD-571



DETAIL OF COLLECTOR CAP

BASE	CONNECTION
1	NC
2	ANODE 3
3	HELI X
4	ANODE 2
5	ANODE 1
6	GRID
7	HEATER&CATHODE
8	HEATER



NOTE : DIMENSIONS ARE IN MILLIMETERS



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