DESCRIPTION AND RATING

TR TUBE GL-1B24-A

The GL-1B24-A is a gas switching tube of the integral-cavity tunable type for use in simple duplexers in pulsed microwave circuits which do not require that the short circuit in the tube have a fixed electrical position. The tube operates to decouple effectively the receiver from a common transmitting and receiving antenna during a transmission period. The operational band is from 8490 to 9600 megacycles.

TECHNICAL INFORMATION

GENERAL CHARACTERISTICS

Electrical

Operational Band	8490 to 9600	Megacycles
Loaded Q, maximum	350	
Ignitor Starting Voltage, maximum	-1000	Volts
Ignitor Voltage Drop, Ignitor Current = 100 Microamperes		
Minimum	325	Volts
Maximum	450	Volts
Leakage Power peak power = 10 kw, pulse repetition rate = 1000pps, pulse duration = 0.5usec, ignitor current = 100ua, frequency = 9375mc, maximum	30	Milliwatts
Ignitor Interaction, Ignitor Current = 100 Microamperes, maximum	0.2	Decibel
Insertion Loss at 9375 Megacycles		
Maximum	1.50	Decibels
Minimum	0.85	Decibel
Recovery Time at 10 Kilowatts Peak, 3 Decibels Down, maximum	4	Microseconds

Mechanical

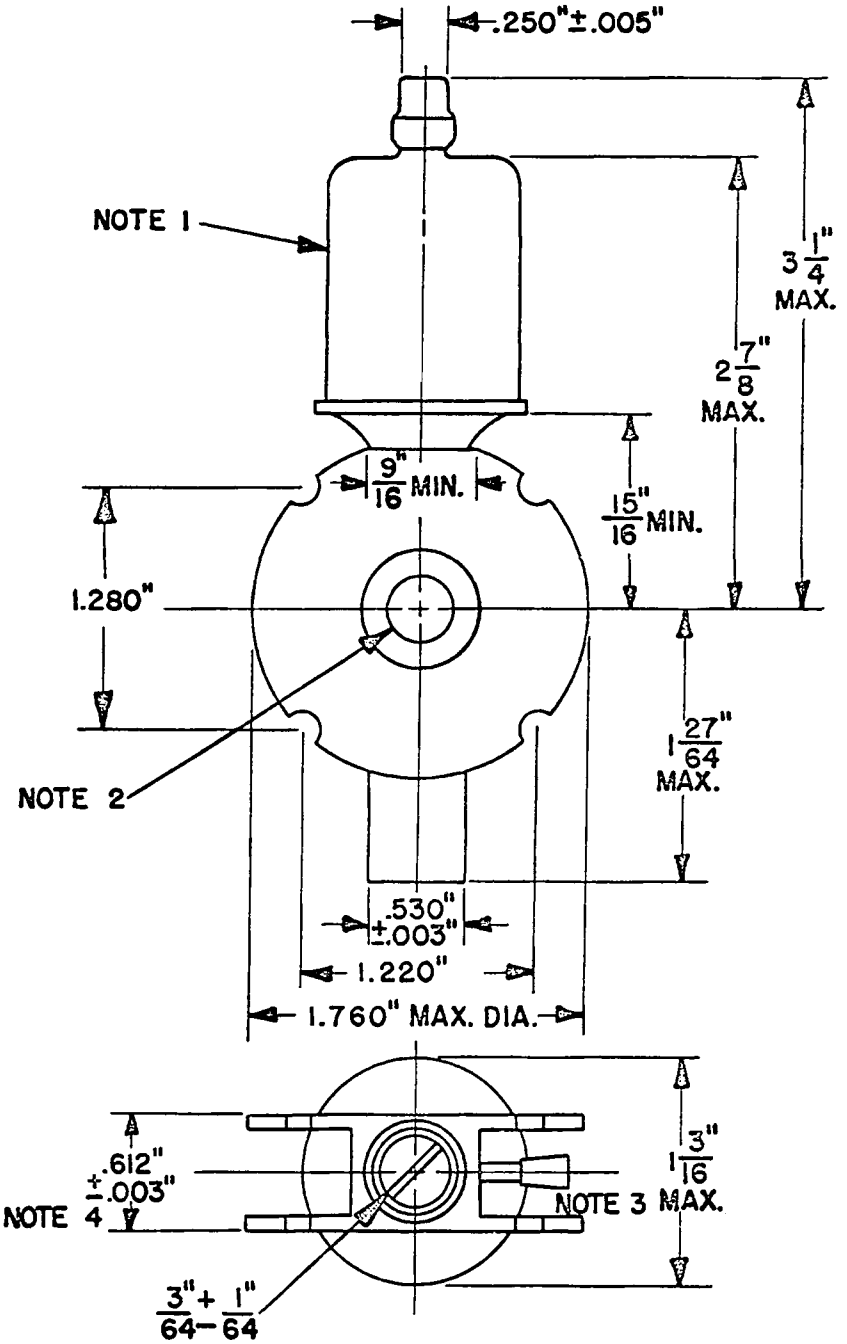
Mounting Position - Any		
Ambient Temperature Range, non-operating	-40 to +100	C
Net Weight, approximate	1/4	Pound

MAXIMUM RATINGS

Igniter Current	200	Microamperes

from RMA release # 470, Feb. 11, 1946

GENERAL ELECTRIC



NOTES:

1. MAXIMUM PROJECTION OF RESERVOIR LIES WITHIN A CYLINDER OF $1\frac{1}{4}$" DIA. WITH AXIS CO-LINEAR WITH TUBE AXIS.
2. NO PART OF IRIS ASSEMBLY SHALL EXTEND BEYOND THE BODY SURFACE.
3. EXHAUST TABULATION NOT TO EXTEND BEYOND PERIPHERY.
4. APPLIES FOR AREA BETWEEN PERIPHERY OF THIS SECTION OF TUBE AND CONCENTRIC CIRCLE OF $\frac{5}{16}$" RADIUS.

N24537AZ October 15, 1952

Outline
GL-1B24-A

TUBE DEPARTMENT

GENERAL ELECTRIC

Schenectady 5, N. Y.