



communications

Electron Devices

L2124 Traveling Wave Tube

Features

- **2.5 to 7.5 GHz**
- **400 Watts**
- **35 dB Gain**
- **PPM Focused**

Typical Operating Conditions

Duty	CW
Cathode Voltage	-6300 VDC
Cathode Current	600 mA
Grid Bias	-200 VDC
Grid Voltage	150 V
Grid Current	0.25 mA
Filament Voltage	-6.3 VDC
Filament Current	1.9 A
Collector #1 Voltage	4000 V
Collector #2 Voltage	1300 V
Noise Power Density (max.)	-20 dBm/MHz

Performance Characteristics

Frequency Range	2.5 to 7.5 GHz
Power Output	400 W min.
RF Drive (equalized)	20 to 27 dBm min.

Maximum Ratings

Helix Current	75 mA
Heatsink Temperature	110°C
VSWR (no damage)	3:1
RF Input Power	+30 dBm

Mechanical Description

Dimensions	See Outline Drawing
Weight	9 lbs.
Cooling	Conduction
Mounting Position	Any

Power Supply Requirements

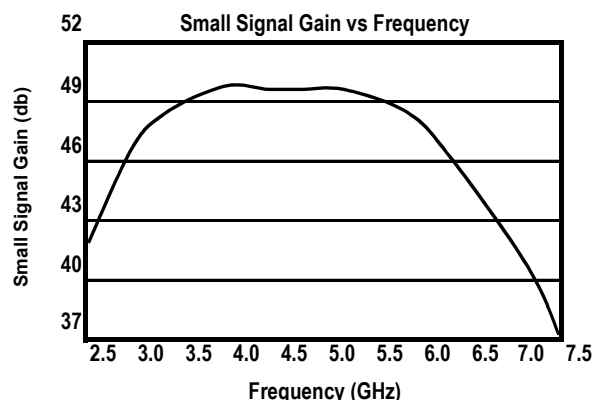
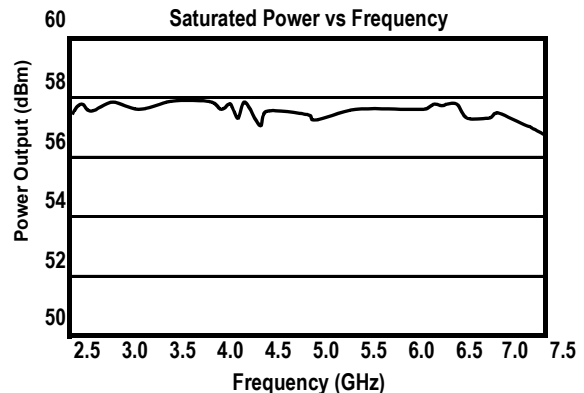
Cathode Voltage Range	-6000 to -6600 VDC
Cathode Current, Max	700 mA
Grid Voltage Range	+100 to +250 VDC
Filament Voltage	-6.3 VDC
Filament Current	to 3.0 A
Collector #1 Voltage	3500 to 4500 V
Collector #2 Voltage	1000 to 1600 V

Note: All voltages with respect to cathode.



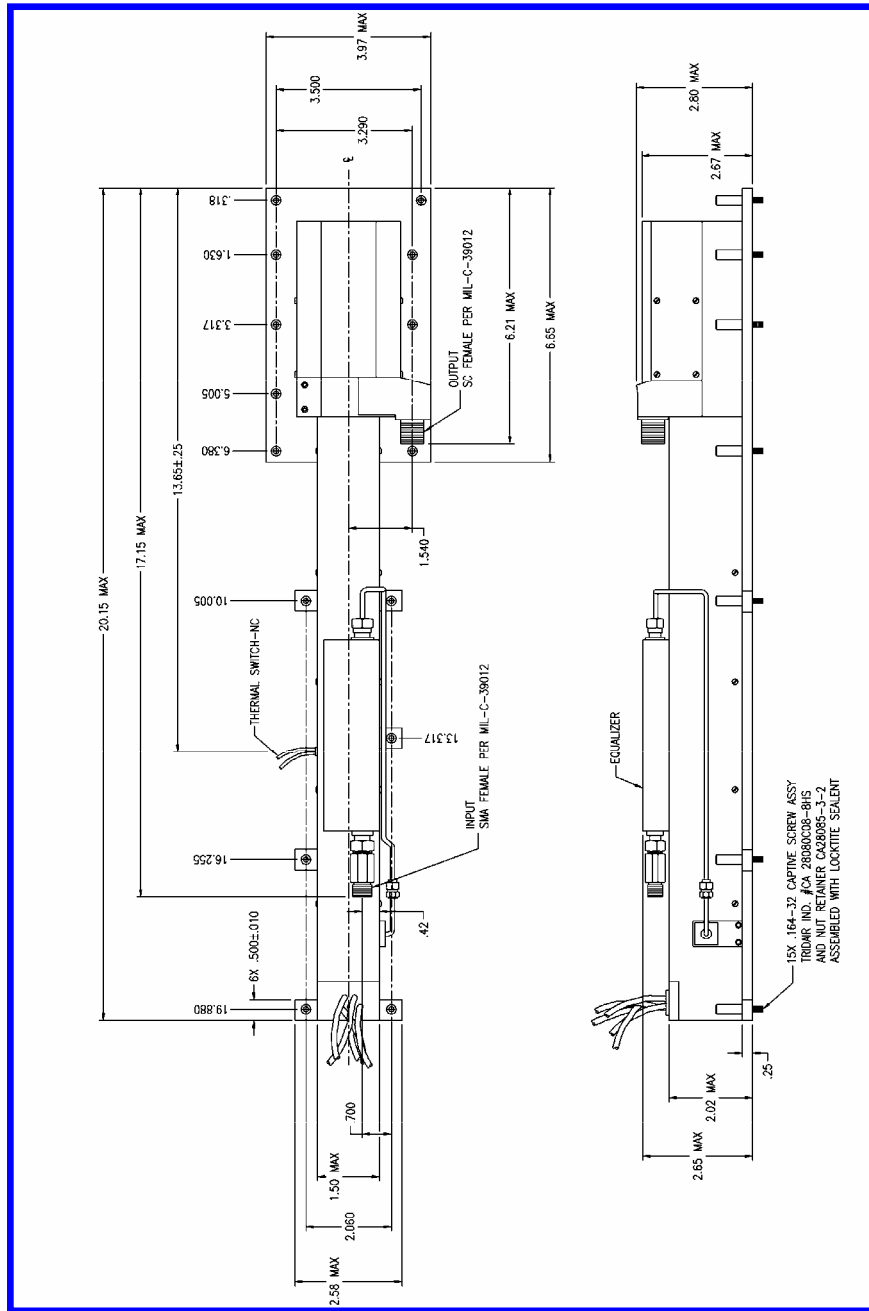
The L2124 is a CW helix traveling wave tube with a power output of 400 watts over the frequency range of 2.5 to 7.5 GHz. The tube has a metal ceramic vacuum envelope, a shadow grid and periodic permanent magnet focusing. The L2124 is suitable for use in ECM and radar systems and is designed for military requirements. DS21240304

Typical Performance



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L2124 Outline Drawing



Current detailed outline drawings are available on request. Specifications and features are subject to change without notice.