communications
Electron Devices

L6108
Mini-Traveling Wave Tube

Features:

- ***13.75 to 14.5 GHz***
- ***125 Watts Minimum***
- ***38 dB Gain Minimum***

Performance Characteristics

Frequency	13.75 to 14.5 GHz
RF Output Power	125 W min
RF Input Power	30 dBm max
Small Signal Gain	38 dB min
Noise Power Density	
Beam On	-40 dBm/MHz
AM/PM Conversion	5°/dB max
Harmonic Separation	-10 dBc max

Typical Operating Conditions

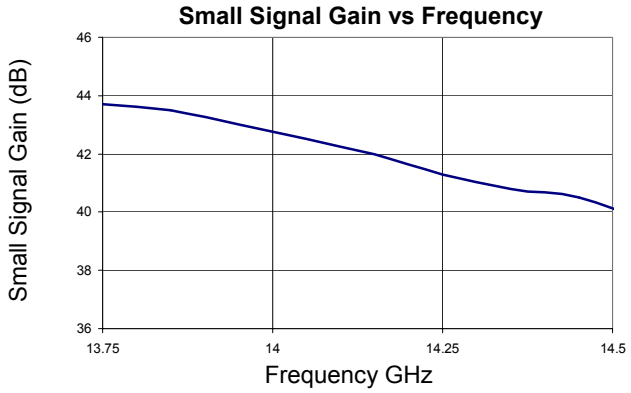
Duty	CW
Cathode Voltage	-5025 VDC
Cathode Current	180 mA
Helix Current-DC	<1 mA
Helix Current-RF	<8 mA
Beam Control	
Anode Voltage-off	-800 VDC
Anode Current	0.1 mA
Filament Voltage	6.3 VDC
Filament Current	0.6 A
Collector 1 Voltage	2450 VDC
Collector 1 Current	120 mA max
Collector 2 Voltage	1550 VDC
Collector 2 Current	90 mA max
Prime Power	450 watts max.

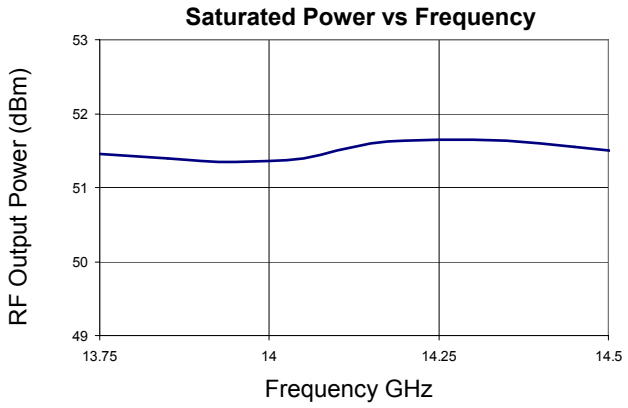
Mechanical Description

Dimensions*	See Outline Drawing
Weight	<1.5 lbs
Cooling	Conduction
Baseplate temperature	-54° to +85° C
RF Input Connector	SMA
RF Output Connector	TNC

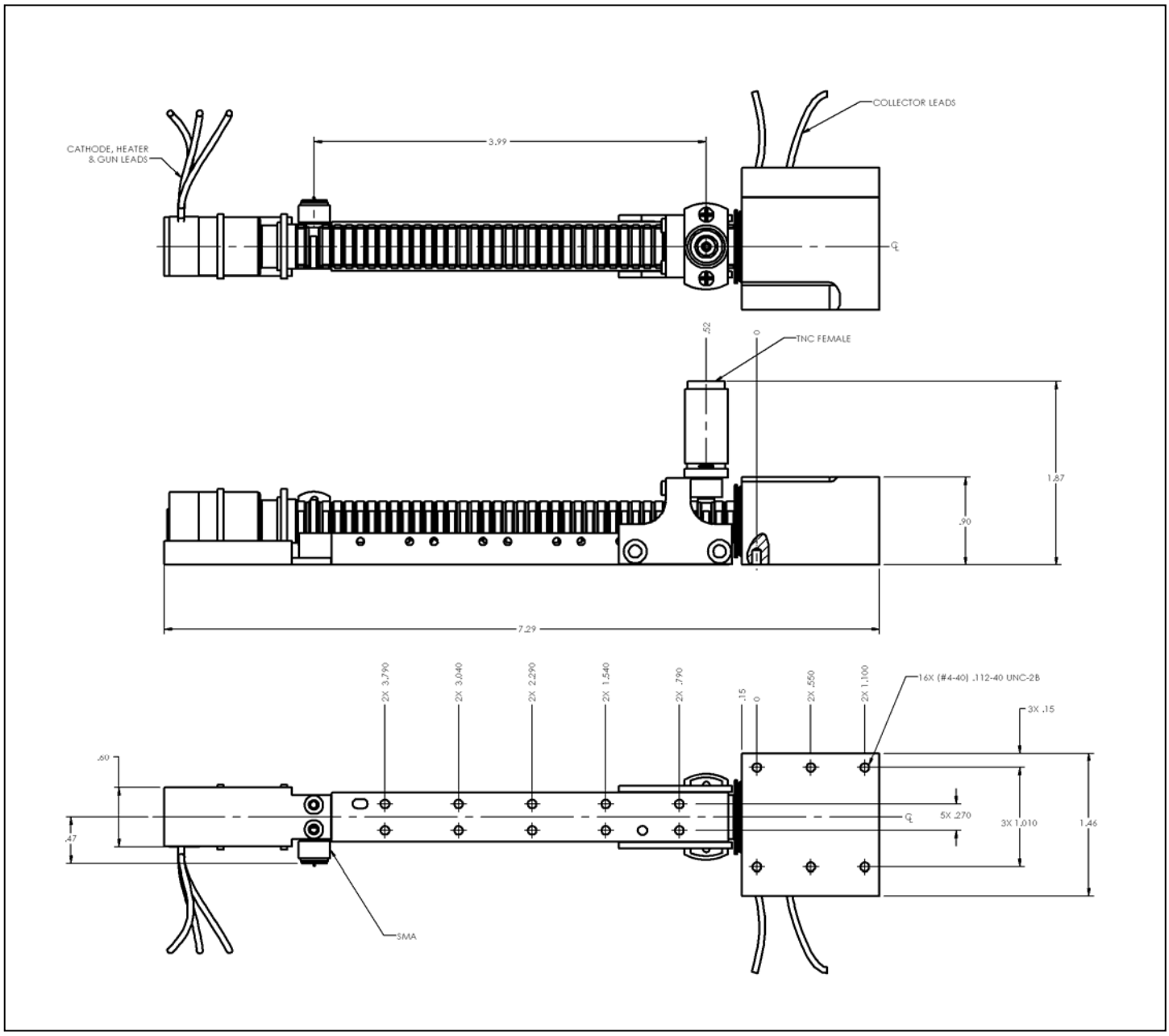
Note: All voltages with respect to cathode.
*Unpackaged

The L6108 is an unpackaged helix traveling tube with a power output of 125 watts minimum over the frequency range of 13.75 to 14.5 GHz. The tube has a metal-ceramic vacuum envelope, a beam control element, a multi-stage depressed collector for high efficiency and utilizes periodic permanent magnet focusing. The L6108 is suitable for use in military and commercial applications. DS61080705





L-6108 Outline Drawing



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