



communications

Electron Devices

L6046

Helix Traveling Wave Tube

Features:

- **6.0 to 18.0 GHz**
- **1000 Watts Pulse Power Output**



Typical Operating Conditions

Cathode Current	1.05 A Peak
Cathode Voltage	-9.5 KVDC
Helix Current	350 mA Peak
Heater Voltage	-6.3 VDC
Heater Current	1.4 A
Collector Voltage #1	5.25 KVDC
Collector Voltage #2	3.0 KVDC
Grid Voltage (On)	+ 90 V Peak
Grid Voltage (Off)	-150 VDC

Performance Characteristics

Frequency Range	6.0 to 18.0 GHz
Power Output	1000 W Peak (see table)
Small Signal Gain.....	40 dB min.
Duty Cycle.....	5 %

Maximum Ratings

Body Current with RF drive	400 mA max. Peak
Prime Power	375 W

Mechanical Description

Dimensions	See Outline Drawing
Weight	5.0 lbs max.
Cooling	Conduction
Mounting Position	Any

RF Characteristics

Noise Power Density	-10 dBm/MHz max.
---------------------------	------------------

All voltages are with respect to cathode.
Specifications subject to change without notice.

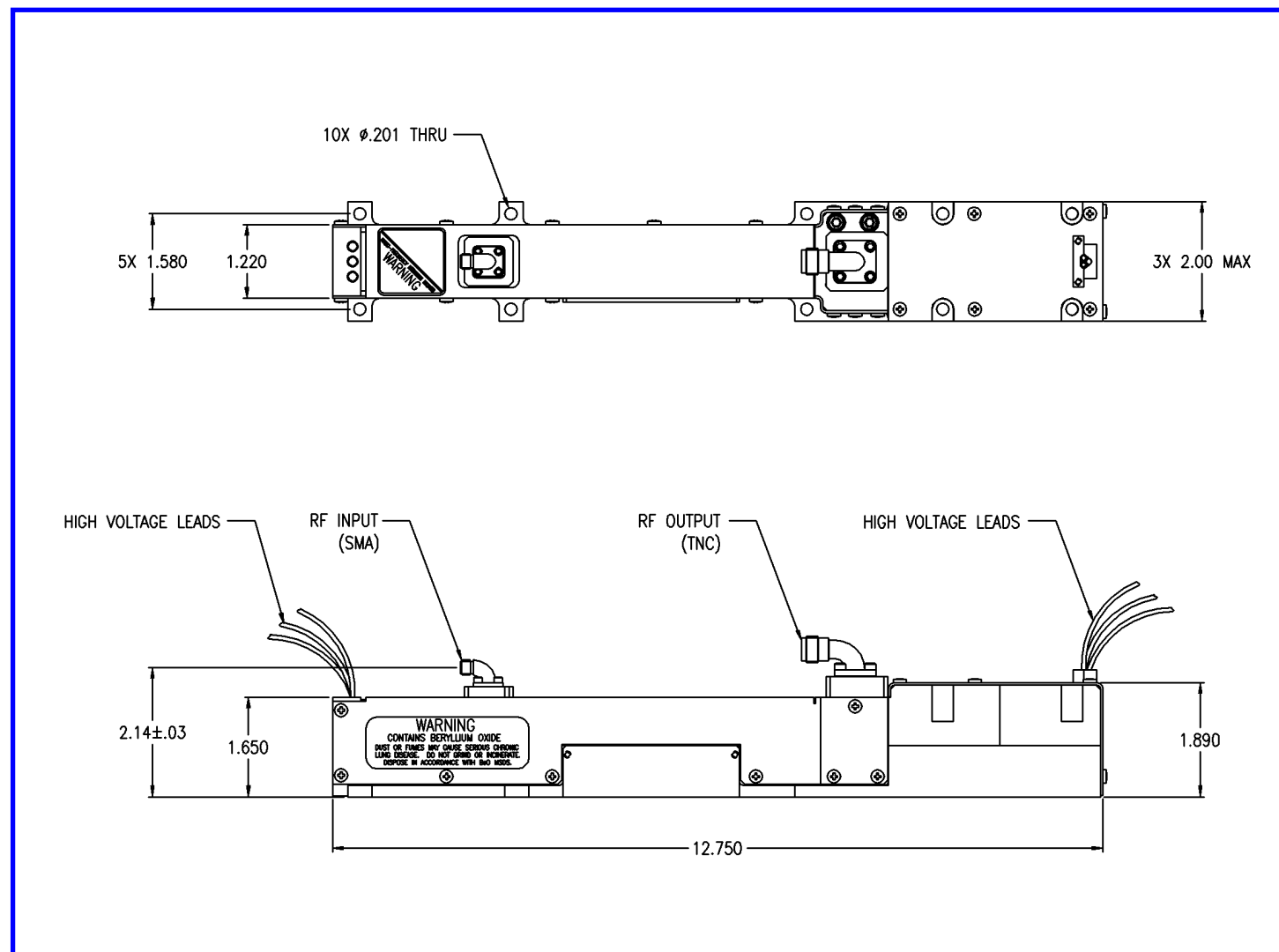
The L6046 is a small, lightweight, conduction cooled, high efficiency helix traveling wave tube providing a nominal pulse power output of 1000 watts over the frequency range of 6.0 to 18.0 GHz. The tube has a metal ceramic vacuum envelope, a two stage depressed collector and utilizes periodic permanent magnet focusing.

The L6046 is ideally suited for use in ECM systems or other broadband applications where minimal size and weight are important. DS60461102

Frequency	Output Power
6.0 – 8.0 GHz	800 Watts Peak
8.0 – 18.0 GHz	1000 Watts Peak

Cleared by DoD/DFOISR for public
release under 02-S-1268 on 4/22/02

L6046 Outline Drawing



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