



communications

Electron Devices

L5714 Traveling Wave Tube

Features

- 2.1 to 2.6 GHz
- 20 kW Peak Minimum
- 45 dB Gain
- PPM Focused

Performance Characteristics

Frequency Range	2.0 to 2.6 GHz
Power Output.....	20 KW min.
Rated Gain.....	45 dB min.
Second Harmonic Power	-25 dBc

Typical Operating Conditions

Duty	0.4%
Cathode Voltage	-20 KVDC
Cathode Current	5.2 A Peak
Helix Current.....	600 mA
Collector Voltage	Ground
Grid Bias Voltage.....	-400 V
Grid Pulse Voltage.....	+200 V
Filament Voltage.....	-6.3 VDC
Filament Current	5.1 A
Grid Current.....	180 mA

Maximum Ratings

Beam Duty	0.4%
Helix Current.....	1500 mA
Baseplate Temperature	100°C

Mechanical Description

Dimensions	See Outline Drawing
Weight.....	30 lbs Max.
Cooling.....	Conduction
Mounting Position	Any

Environmental Capability

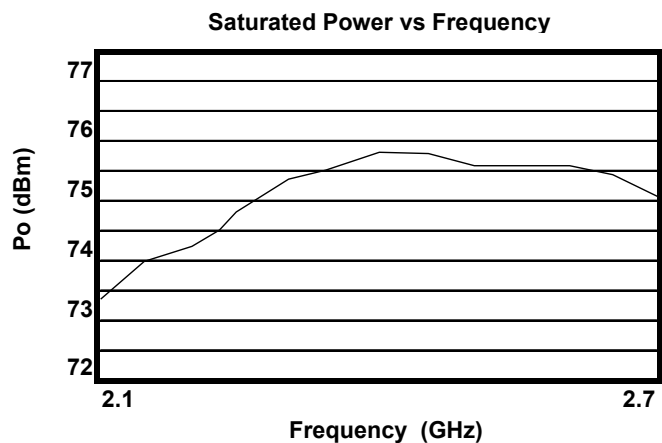
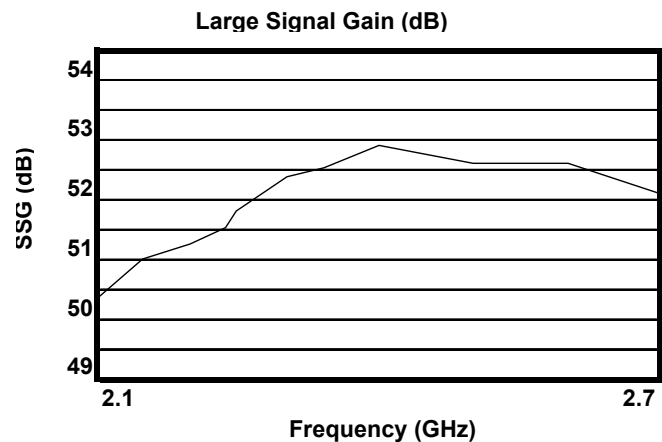
Shock.....	30 g
Vibration.....	10 g
Ambient Temperature	-54°C to 100°C
Altitude.....	70,000 feet

Power Supply Requirements

Cathode Voltage Range	-16.0 to -24.0 KVDC
Cathode Current (Maximum)	6.0 A Peak
Grid Pulse Voltage Range	+100 to +225 VDC
Grid Current.....	300 mA max.
Grid Bias Voltage.....	-400 VDC max.
Filament Voltage.....	-6.3 VDC
Filament Current.....	4 to 6.0 A max.
All voltages are with respect to cathode.	

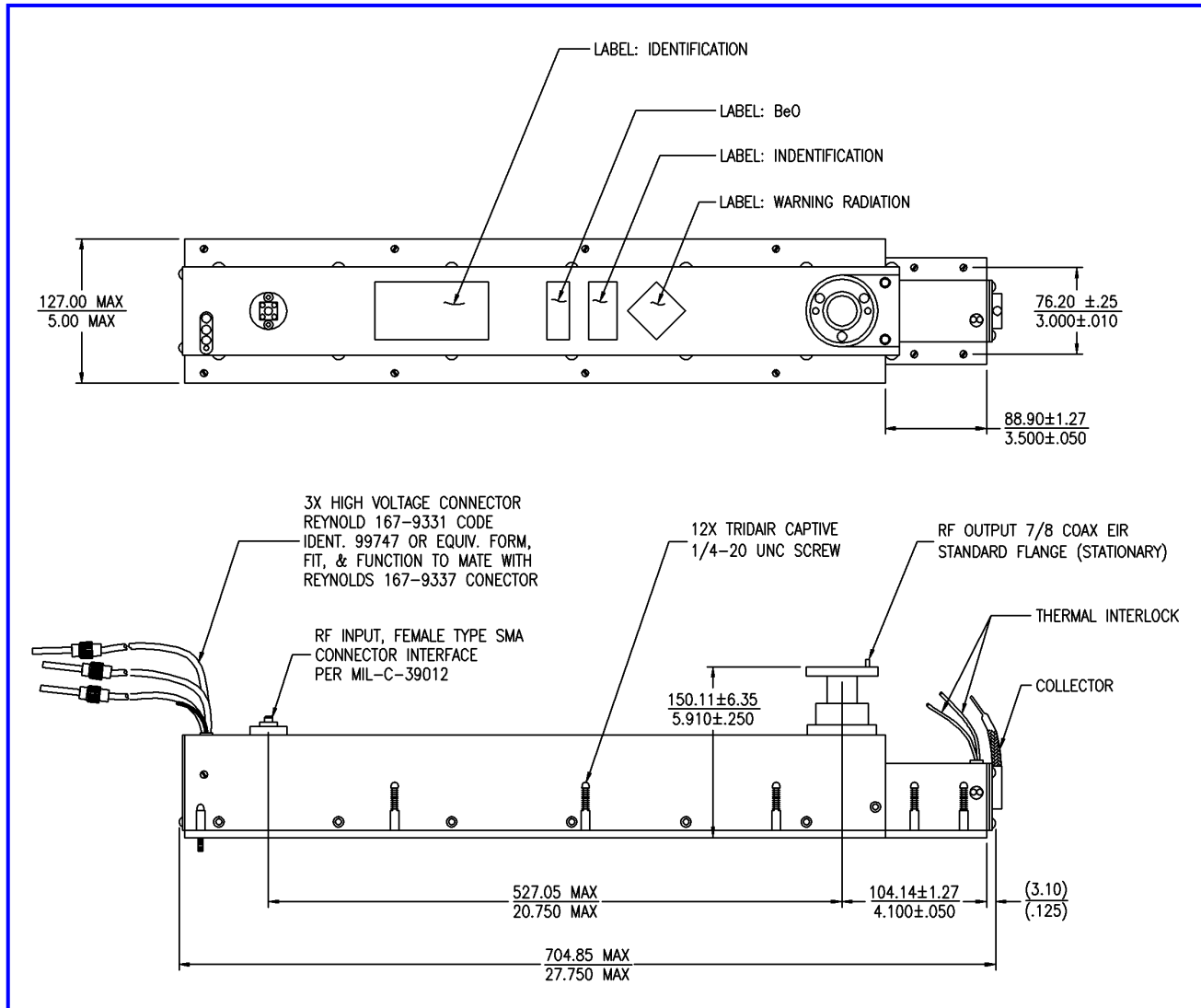


The L5714 is a high efficiency ring loop traveling wave tube having a minimum power output of 20 kilowatts peak over the frequency range of 2.1 to 2.6 GHz. The tube has a metal-ceramic vacuum envelope and utilizes periodic permanent magnet focusing. DS57141102



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L5714 Outline Drawing



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