



communications

Electron Devices

L6028 Traveling Wave Tube

Features

- **8.7 to 9.4 GHz**
- **8 kW Peak Minimum**
- **60 dB Gain**
- **PPM Focused**

Performance Characteristics

Frequency Range.....	8.7 to 9.4 GHz
Power Output	8000 W min.
Rated Gain	60 dB min.
Second Harmonic Power.....	-25 dBc

Typical Operating Conditions

Duty	2.5%
Cathode Voltage	-15 KVDC
Cathode Current	2.6 A
Helix Current	450 mA
Collector Voltage	10.5 KVDC
Grid Bias Voltage	-300 V
Grid Pulse Voltage	+300 V
Filament Voltage	-6.3 VDC
Filament Current	3.0 A
Grid Current.....	2.0 mA

Maximum Ratings

Beam Duty.....	3.0%
Helix Current	800 mA
Baseplate Temperature.....	100°C

Mechanical Description

Dimensions.....	See Outline Drawing
Weight	4.5 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

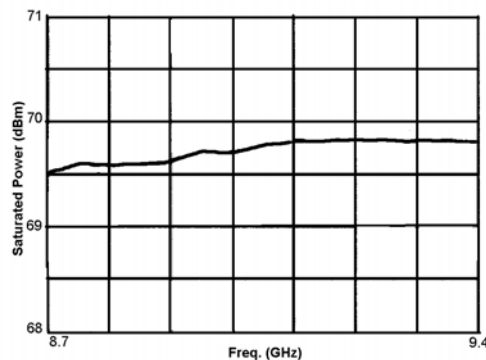
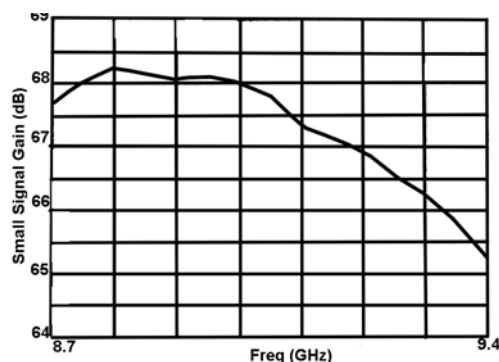
Power Supply Requirements

Cathode Voltage Range	-13.7 to -15.2 KVDC
Cathode Current (Maximum).....	3.0 A Peak
Grid Pulse Voltage Range.....	250 to 400 VDC
Grid Current.....	20 mA max.
Grid Bias Voltage	-370 VDC max.
Filament Voltage	-6.3 VDC
Filament Current.....	2.4 to 3.5 A

All voltages are with respect to cathode.

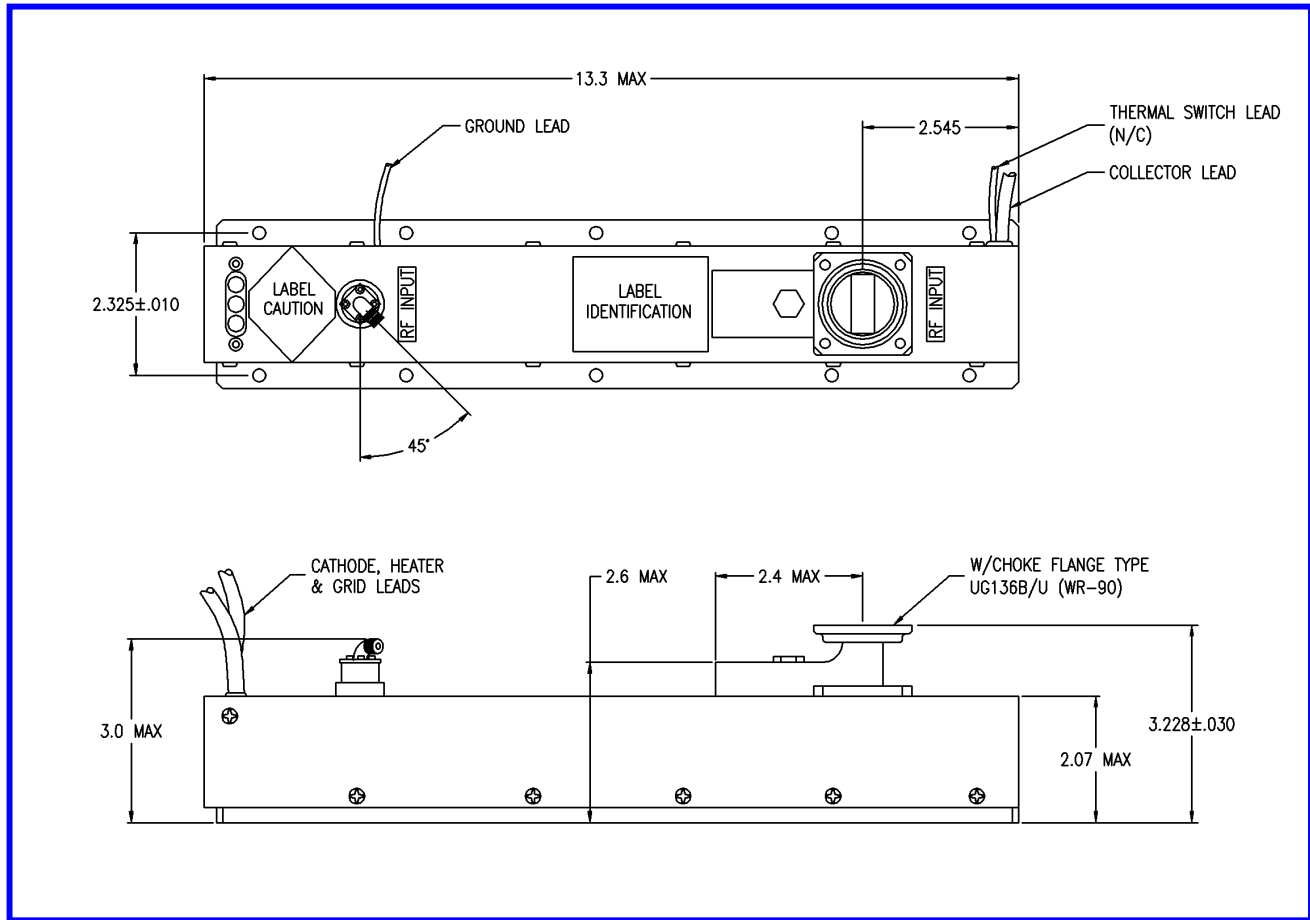


The L6028 is a high efficiency ring loop/helix traveling wave tube having a minimum power output of 8000 watts peak over the frequency range of 8.7 to 9.4 GHz. The tube has a metal-ceramic vacuum envelope and utilizes periodic permanent magnet focusing. The L6028 is suitable for use in military and commercial radar systems. DS60281102



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L6028 Outline Drawing



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