



communications

Electron Devices

L6113

Helix Traveling Wave Tube

Features

- **X-Band**
- **1 kW Peak Min.**
- **PPM Focused**
- **Shadow Grid**



Typical Operating Conditions

Duty	5%
Cathode Voltage	-7.5 KV
Cathode Current	1.0 A Peak
Heater Voltage	-6.3 VDC
Heater Current	1.4 A
Collector 1 Voltage	5.36 KV
Collector 1 Current	70-300 mA
Collector 2 Voltage	4.25 KV
Collector 2 Current	400-700 mA
Collector 3 Voltage	2.06 KV
Collector 3 Current	200-400 mA
Grid Voltage	+165 V Peak
Grid Bias Voltage	-200 VDC
RF Input Power	+29 dBm

Mechanical Description

Dimensions (excluding connectors)	10.9"x1.9"x1.9"
Cooling	Conduction

Environmental Capability

Shock	15 g
Vibration	10 g
Mounting Surface Temperature	- 54° to + 100°C
Altitude	70,000 feet

The L6113 is an X band traveling wave tube having a minimum peak power output of 1000 watts over a frequency range of 2 GHz at a maximum duty cycle of 5%. The tube has a metal ceramic vacuum envelope, a non-intercepting grid, a triple stage depressed collector and utilizes periodic permanent magnet focusing. It is designed for MPM applications where the TWT and associated power supply are housed within a single box. DS61130409

Notes:

1. Other performance characteristics available upon request.
2. Designed for MIL-SPEC operation. Environmental and screening testing available upon request.
3. Collector, grid and heater voltages are with respect to cathode.
4. The TWT must be properly mounted into a conduction cooled package when operating; the Environmental Capability only applies with proper mounting.

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