VKA-7934 Series Klystron



CPI Microwave Power Products' (MPP) klystrons were the first to be used in both commercial and military satellite communications uplinks and are now the worldwide standards for this class of operation covering C-band, X-band and Ku-band frequencies. In 1977, MPP introduced high performance Ka-band amplifiers for earth-satellite communications. These products, based on high reliability military products, are now available for long-life high-performance commercial applications. MPP offers a wide variety of Ka-band products, at power levels ranging from 250 watts to 1 MW continuous wave.

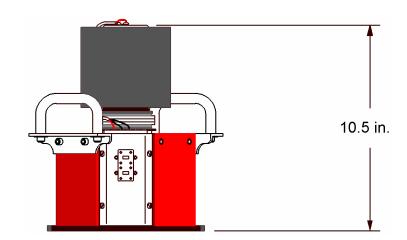
The VKA-7934 Klystron product line is currently under development. Initial test of the fixed tuned klystron is complete. Measured data for this klystron can be found on the second page. The tunable klystron will be tested by the end of this year.

Expected Operating Parameters

Power Output	750 to 1500*	Watts
Beam Voltage	10.5	kV
Beam Current	1.30	Α
Frequency	27.5 to 31.3	GHz
Bandwidth	up to 250	MHz (-1dB)
Tunable Bandwidth	1.25	GHz
Gain	40	dB
Cooling Method	Forced Air	
Coolant Flow Rate	1150	lbs/hr
Pressure Drop	3	psig
Total Weight	~50	lbs
Size	10.5H x 8 x 8	inches

^{*750} Watts Tunable, 1500 Watts Fixed Tuned.

Outline





Features

- High Power
- Low Operating Voltage
- Up to 125 MHz Instantaneous Bandwidth
- 1 GHz Tunable and Fixed-Tuned Options Available
- Air Cooled
- Rare-Earth Permanent Magnet Focusing

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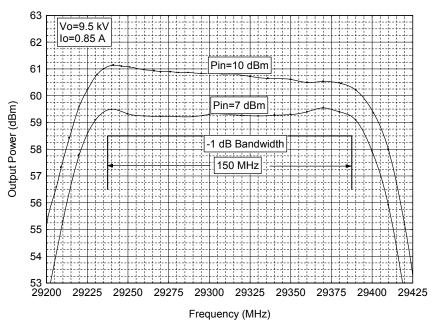


Expected Performance Characteristics

Measured data for the VKA-7934 Fixed Tuned Klystron Serial Number 001 tuned to 150 MHz Instantaneous Bandwidth.

Frequency Response





VKA-7934 Klystron Serial Number 001

Transfer and Gain Curve

