

# GPS Filter Amplifier L5996



Specifications are subject to change without notice

## Electrical Specifications (+25°C)

Parameter	Value
Center Frequency	(L1 Channel) 1575.4 + 10 MHz (L2 Channel) 1227.6 + 10 MHz
1 dB Bandwidth	>± 15 MHz Minimum
3 dB Bandwidth	± 25 MHz Minimum to ± 35 MHz Maximum
30 dB Bandwidth	± 75 MHz Maximum
50 dB Two-sided Bandwidth	± 150 MHz Maximum
Center Frequency Gain	19 Minimum, 29 Maximum
(-2 Version only) Aux Amplifier Gain	40 to 50 dB
Ultimate Rejection	40 dBc minimum for all frequencies between 100 MHz and 18 GHz that are greater than + 150 MHz from L1 and L2. 50 dBc minimum from 1 GHz to 2 GHz.
Signal Band Noise Figure	2.5 dB Maximum at + 10 MHz from L1 and L2 3.0 dB Maximum over Operating Temperature
VSWR (In & Out)	1.6:1 Maximum referenced to 50 Ohms
Ch.-Ch. ? Amplitude F0 ±8	< 0.4 dB
Ch.-Ch. ? Time Delay F0 ±8	< 7 ns
DC Power	+5 ±0.5 VDC Via each RF Output Connector
Current Draw	0.350 Amps Maximum
Passband Ripple	± .33 dB Maximum
In-Band Power Handling (frequencies Fo <+150 MHz)	1 Watt CW Maximum
Out-Of Band Power Handling (frequencies Fo >+150 MHz)	200 Volts per Meter peak
RF Output power	+12 dBm Maximum
Delta Time Delay	10 ns peak-peak Maximum
Limiter Recovery Time	< 50 µs

## Environmental Specifications (by design)

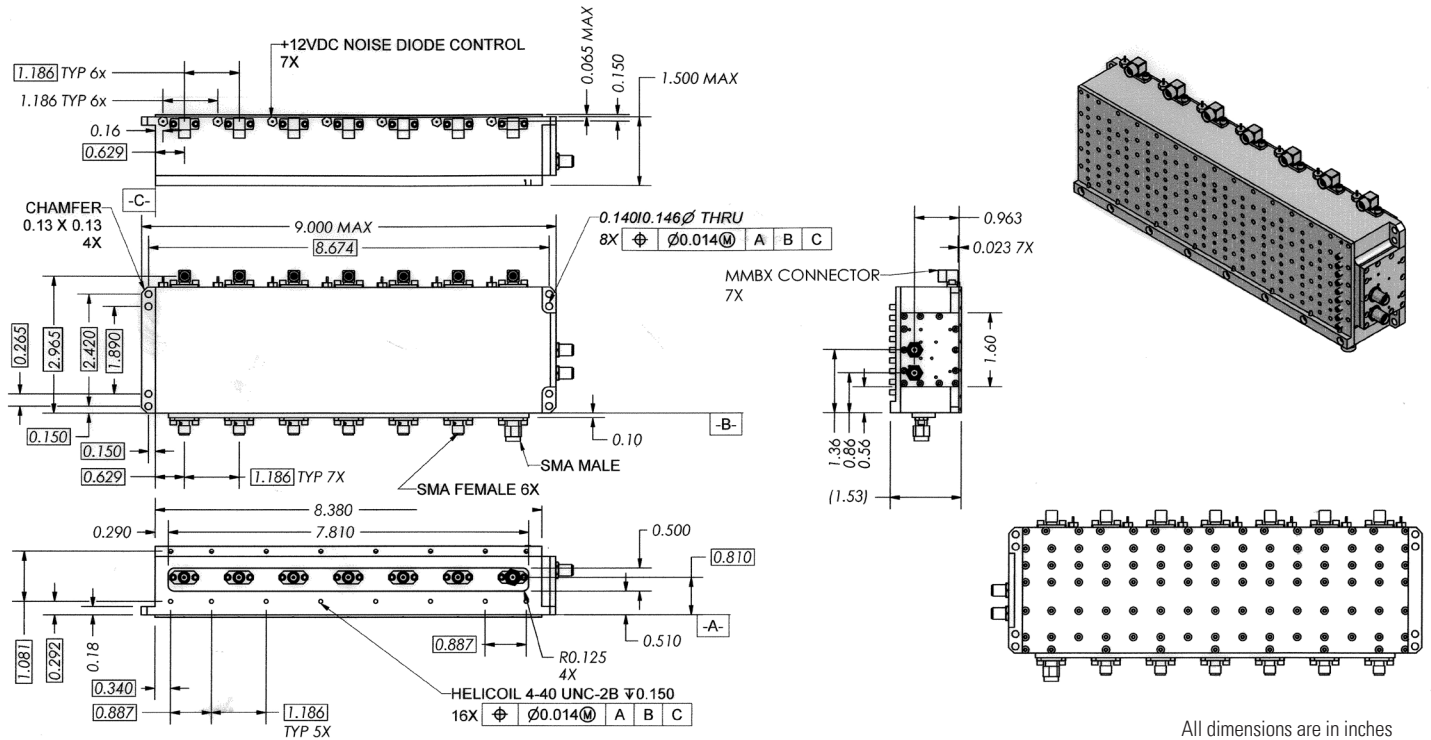
Parameter	Value
Continuous Operating Temp	- 40° to + 80°C
Non Operating Temperature	- 62° to + 80°C
Temperature, Operate, Case, Ambient	- 40° to + 85°C
Humidity	< 95%, non-condensing
Shock	30g peak for 11ms
Vibration	+ 20 Grms oper., 0.1g <sup>2</sup> /Hz, 30Hz to 500Hz for 1 hr.
Altitude, operate	0 – 60,000 feet

## Mechanical Specifications

Parameter	Value
Connectors	(Input) 6 SMA Male and 1 SMA Female per MIL-C-39012 (Output) 7 SMA Female per MIL-C-39012 (Aux) 2 SMA Female per MIL-C-39012
Finish	Haze Gray per MIL-P-24441, Type 1
Weight	2.5 lbs Maximum
Hermeticity (Input connector surface only)	Per MIL-STD-883 Method 112 Condition "D"



Outline Drawing



Need More Help? Need a Variant of This Product?

Contact Mercury's RF & Microwave engineering team at [rf.microwave@rcy.com](mailto:rf.microwave@rcy.com) or visit [www.rcy.com/rf](http://www.rcy.com/rf) for a detailed listing of RF and Microwave products.



Corporate Headquarters

50 Minuteman Road • Andover, MA 01810 USA • (978) 967-1401 • (866) 627-6951 • Fax (978) 256-3599 • [www.rcy.com](http://www.rcy.com)