

# Space Qualified GPS L1-L2 Filter/Amplifier

## L56112



Specifications are subject to change without notice

### Specifications

Parameter	Value
Center Frequency	L1 Channel: 1575.4 ± 10 MHz L2 Channel: 1227.6 ± 10 MHz
35 dB Two-Sided Bandwidth	200 MHz maximum
Rejection from 10 MHz to 975 MHz	60 dB minimum
Rejection from 1775 MHz to 18 GHz	60 dB minimum
Center Frequency Gain	43 dB ± 3 dB at L1 and L2
Noise Figure (25° C)	2.5 dB maximum centered at L1 and L2
Noise Figure (50° C)	2.9 dB maximum centered at L1 and L2
VSWR, Input	1.5:1 maximum
VSWR, Output	2:1 maximum
Voltage	+5 VDC through RF output connector (only)
Current Draw	0.150 Amps maximum
Operating Temperature	-30° to +50° C
Survival Temperature	-80° to +125° C
Shock (Survival)	Frequency (Hz)      SRS (g)
	20                      40
	30                      80
	320                     270
	760                     1140
	1500                    3500
	2700                    6600
	4200                    9600
	5000                    9600
10000                   2000	

### Features

- L1 and L2 Operation
- Low Noise Figure
- Cavity Filter
- Discrete Amplifier
- Excellent out-of-band attenuation
- Space Qualified

### Applications

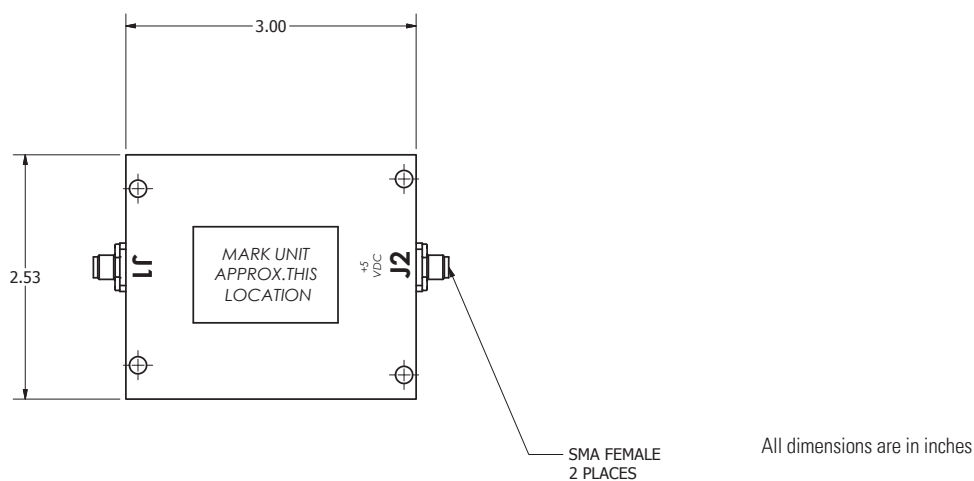
- Spacecraft
- Test Equipment



## Specifications (continued)

Parameter	Value
Vibration (Survival)	Frequency (Hz)    PSD (g <sup>2</sup> /Hz)
	5                      0.05
	10                     0.1
	63                     0.1
	64                     0.2
	72                     0.2
	73                     0.1
	96                     0.1
	97                     1.25
	107                    1.25
	108                    0.095
	300                    0.5
	500                    0.5
	1000                  0.01
2000                  0.01	
RF Emission	-80 dBm maximum
Radiation Hardness	10 krad minimum
Finish	Aeroglaze Z306 Flat Black Absorptive Paint
Outgassing	<1%TML <0.1% VCML
Discrete Components	High-Reliability Designed and Screened
Weight	220 Grams maximum
Connectors	SMA Female

## Outline Drawing



## Need More Help? Need a Variant of This Product?

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