

General Description

The AS10-01A is a general dual band HPA module that have high linearity & gain performance. The module features a flat high gain with excellent current consumption.



Applications

- Drone jammer
- Car-mount jammer
- Scientific measurement system
- EMC/EMI test

Electrical Specification (GPS L2)

| Parameter | Specification | Comment |
|---------------------------------------|----------------|--------------|
| Frequency | 1160 ~ 1254MHz | |
| Output Power | 40dBm | Psat |
| Gain Flatness | ± 1 dB | Psat |
| Input Power for rated output power | 0 | Typ. |
| Input/Output Return Loss | -10dB | |
| Quiescent Current | 0.8A | |
| Current Consumption | 1.5A | Typ. @ 40dBm |
| Harmonic level | -60dBc | 2nd @ 40dBm |
| | -60dBc | 3rd @ 40dBm |

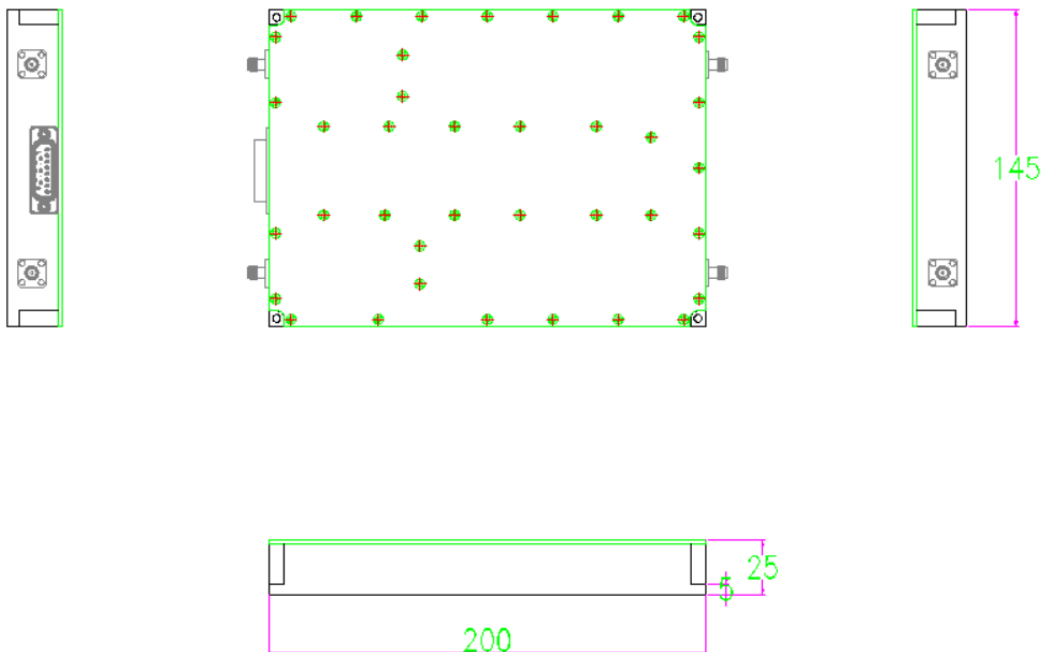
Electrical Specification (GPS L1)

| Parameter | Specification | Comment |
|---------------------------------------|----------------|--------------|
| Frequency | 1563 ~ 1610MHz | |
| Output Power | 40dBm | Psat |
| Gain Flatness | ± 1 dB | Psat |
| Input Power for rated output power | 0 | Typ. |
| Input/Output Return Loss | -15 dB | |
| Quiescent Current | 0.8A | |
| Current Consumption | 1.5A | Typ. @ 40dBm |
| Harmonic level | -60dBc | 2nd @ 40dBm |
| | -60dBc | 3rd @ 40dBm |

Power / Data Connector, D-sub 15pin, Male

| Pin | Specification | Comment |
|-----------|--|------------------------------|
| 1 | GPS L1 Shutdown | TTL Logic Low (0V) |
| 2 | 0.63V _{DC} | Current Monitor @ 25mW/100mA |
| 3 | 0.80V _{DC} | Temp. Out @ 10mV/°C+500mV |
| 4 | 1.77V _{DC} (GPS L2) 1.80V _{DC} (GPS L1) | Forward Out @ 50mV/dB |
| 9 | GPS L2 Shutdown | TTL Logic Low (0V) |
| 5,6,12,13 | GND | |
| 7,8,14,15 | +28V | |
| 10,11 | N/C | |

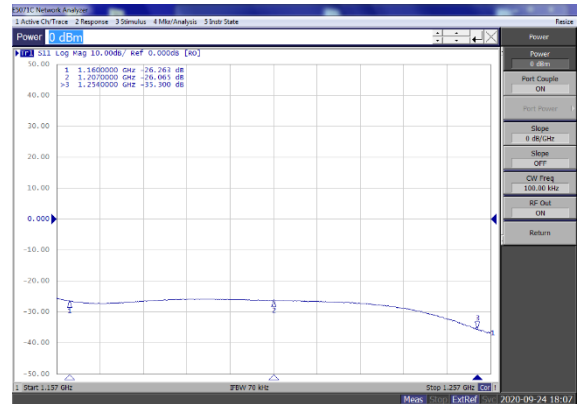
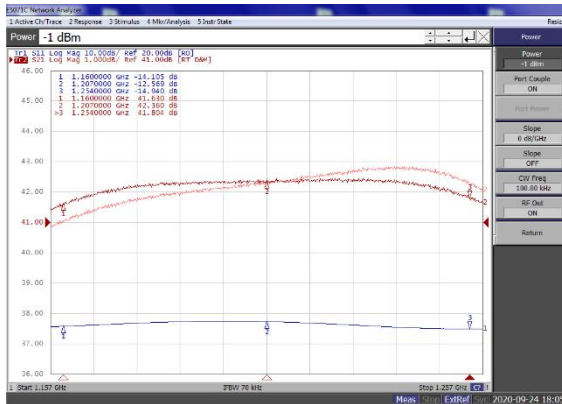
Mechanical specification



Performance Plot (1160~1254MHz : GPS L2)

Plot 1 - Small Signal and P_{SAT}
 Top Curve: Small Signal Gain @ $P_{IN} = -20dBm$
 Middle Curve: P_{SAT} @ $P_{IN} = -1dBm$
 Reference: 41dB, 1dB/div.
 Bottom Curve: Input Return Loss
 Reference: 10dB, 20dB/div.

Plots 2 – Output Return Loss
 Curve: Output Return Loss @ $P_{IN} = 0dBm$
 Reference: 10dB, 0dB/div.



Performance Plot (1563~1610MHz : GPS L1)

Plot 3 - Small Signal and P_{SAT}
 Top Curve: Small Signal Gain @ $P_{IN} = -20dBm$
 Middle Curve: P_{SAT} @ $P_{IN} = -1dBm$
 Reference: 40dB, 1dB/div.
 Bottom Curve: Input Return Loss
 Reference: 10dB, 20dB/div.

Plots 4 – Output Return Loss
 Curve: Output Return Loss @ $P_{IN} = 0dBm$
 Reference: 10dB, 0dB/div.

