

50Ω (match on input & output) Broadband DC to 20 GHz

Case PN: 4HH6H41C5A2

Features:

- * Frequency Range: DC to 20 GHz
- * Noise Figure: typical 1.9dB @ 10 GHz
- * Gain: typical 15dB @ 10 GHz
- * Output P1dB: 25 dBm
- * Output IP3: 35 dBm
- * Wide DC Voltage Input: +9~12V
- * Operating Current: 210mA
- * Stainless Steel 2.92mm Female Connector
- * Integrated 10 Watt RF Limiter for protection against high power incident signal (TGL2217-SM Limiter)
- * Integrated Active Bias Controller HMC980LP4E for signal power supply
- * High Quality Rogers RO4350 RF PCB (very low loss and high thermal performance)
- * ROHS Compliant

Applications:

- * Test Instrumentation
- * Wideband A/D System
- * General Purpose Wireless
- * Radar & VSAT
- * SDR & Ham Radio



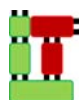
General Description:

LNADC20GL is a broadband, low noise amplifier with 15 dB typical gain from DC to 20 GHz in a small 1.688" x 1.813" x 0.49" shielded RF enclosure (PN: 4HH6H41C5A2). This LNA also integrates wide band RF Limiter TGL2217-SM as front end for protecting sensitive GaN amplifier CMD192C5 inside. The GaN amplifier is biased by active bias controller HMC980LP4E. The Amplifier has output 1dB compression point of +25 dBm and noise figure of 1.9 dB at 10G GHZ. It weights 2.3 Oz.

Electrical Specifications:

Item	Parameter	Conditions	Min	Typ	Max	Units
1	Operational Frequency Range		DC		20	GHz
2	Test Frequency			10		GHz
3	Gain			15		dB
4	Input Return Loss			23		dB
5	Output Return Loss			13		dB
6	Noise Figure			1.9		dB
7	Output P1dB			+25		dBm
8	Current, I _{DD}			210		mA

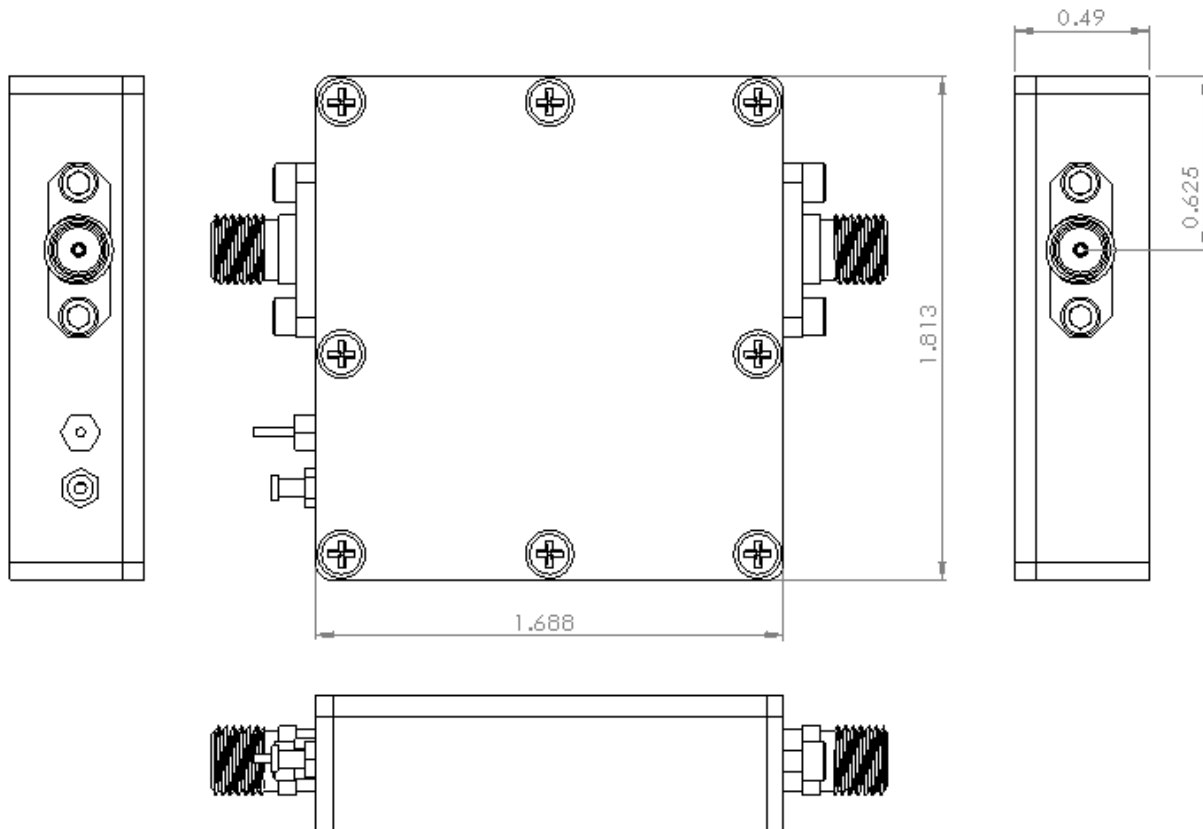
Test Conditions: V_{DD}=+10V, I_{dd} = 210 mA (typ.) Temp = +25 °C, 50Ω system.



Absolute Maximum Ratings

Item	Parameter	Rating	UNITS
1	Max Device Voltage	+12	V
2	Max RF input Power	+10	Watts
3	Operating Temperature	-40 to +85	°C
4	Max Storage Temperature	-65 to +150	°C

Outline Drawing (inch)



Eight #2-56 Mounting Holes on back of Enclosure

