



Features and Benefits

5.4 to 5.9GHz Frequency Range
Gain Flatness $<\pm 0.3\text{dB}$
Typical N.F. $<0.7\text{dB}$
Typical Gain 28dB
+33 dBm (2W) CW Limiter
+8V to +15V 80mA low DC power consumption
Internal DC regulator
Advance PHEMT Technology
Reverse Voltage Protection
MIL-883, MIL45208 construction and reliability
Hermetic Seal Option

Typical Applications

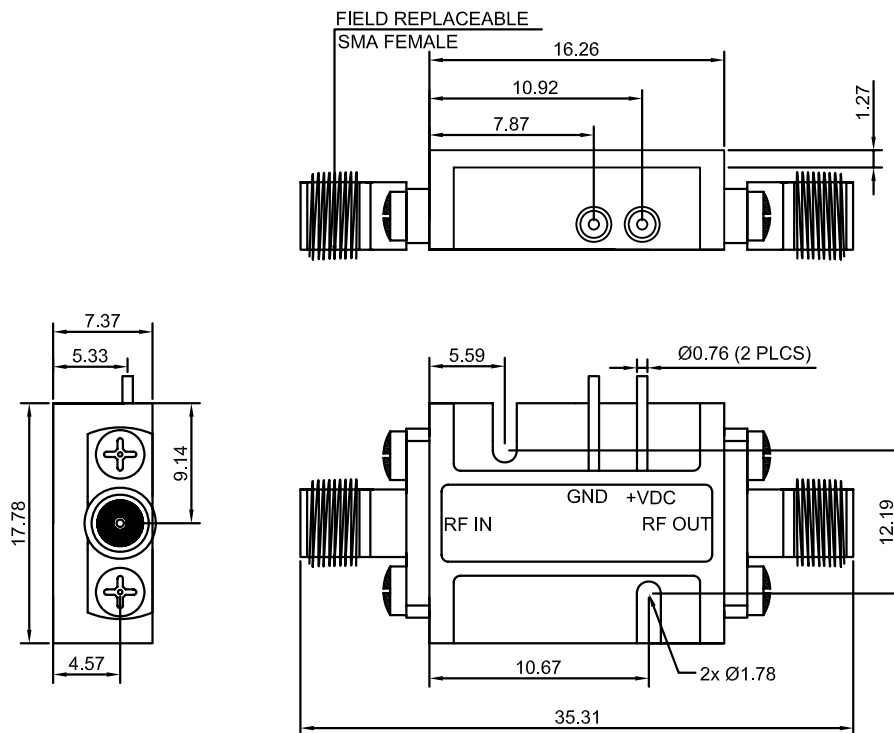
Microwave Radio Systems
SATCOM
Radar
Receiver Front End
Test Equipment
Telemetry

Description

The LNA1716X-5.4GHz-5.9GHz-A is a Low Noise Amplifier with super low noise figure ($<0.9\text{dB}$, 0.7dB typical), Lower NF options are also available with custom flatness, VSWR, P1dB, and outline. An internal limiter at the input offers protection of up to 2W CW of RF input power over the full band.

Mechanical Drawing & Pin Connections

Drawing No:MD170004-2



Unit: mm
1mm=0.0394 inch

**Key Specifications at 23°C**

Parameter	Value			Unit	Note
	Min.	Typ.	Max.		
Frequency	5.4		5.9	GHz	Customizable
Gain	28	29	30	dB	Customizable
Gain Flatness	-	±0.3	±0.5	dB	Customizable
In/Out VSWR	-	1.25	1.40	-	Customizable
Output P1dB	+10	+12	-	dBm	Customizable
DC Power	+8	+12	+16	V@mA	@80 mA
Noise Figure	-	0.7	1.0	dB	
Outline / Package	-	-	-	-	SMT

Absolute Maximum Ratings

Parameter	Min.	Max.	Unit	Note
Operating Temperature (Case)	-54	+85	°C	95% humidity, non-condensing
Storage Temperature (Case)	-54	+115	°C	95% humidity, non-condensing
RF Input Power	-	33 CW	dBm	+47dBm for 0.1μs pulse, 1% D.C.
Die Junction Temp (Tj)	-	+150	°C	For GaAs devices
Positive Supply Voltage		+16	V	At +V DC Pin
Negative Voltage	-	-10	V	Reverse Voltage

Typical Measured Data