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LNA1716X-0.5GHz-6.0GHz-A
Ultra-Wideband Super Low Noise Amplifier

Features and Benefits

0.5 to 6.0GHz Frequency Range (usable to 100MHz)
Gain Flatness <±0.8dB
Typical N.F. <0.9dB
Typical Gain 30dB
+11V to +15V 115mA 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
GPS, PCS, Wi-Fi, 4G/5G Receiver Front End
Test Bench Post Amp LNA

Description

The LNA1716X-0.5GHz-6.0GHz-A is an ultra-wideband LNA with super low noise figure (<1.0dB, 0.8dB typical), low VSWR, and low flatness across the entire 0.1 to 6.0GHz band for use in many applications where lowest NF, VSWR and linearity are required.

Mechanical Drawing & Pin Connections

Drawing No:MD170004-2
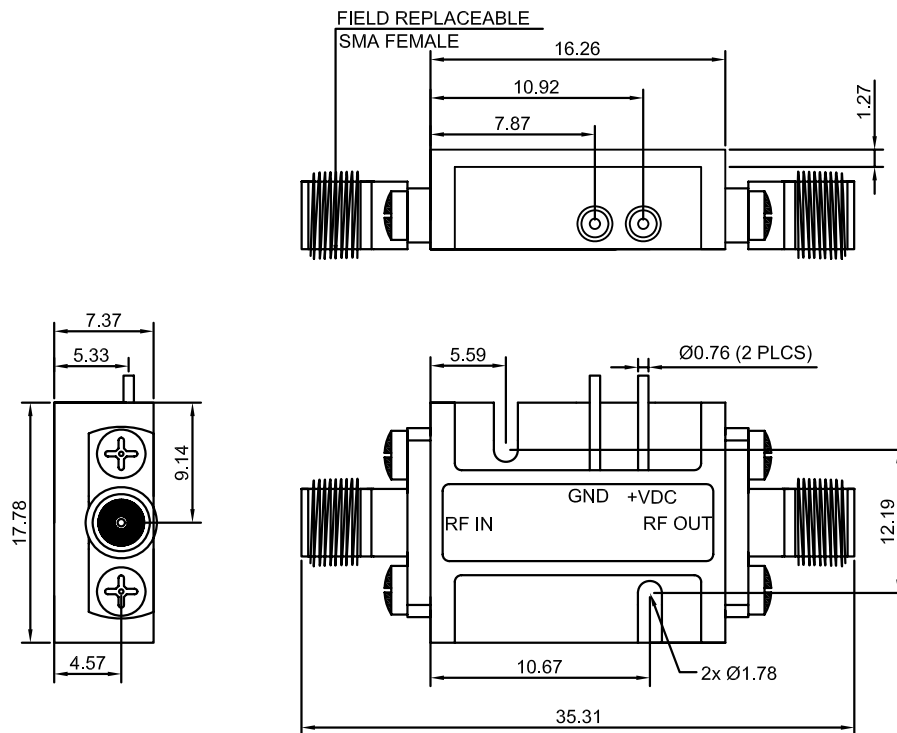
Unit: mm
1mm=0.0394 inch

Key Specifications at 23°C

Parameter	Value			Unit	Note
	Min.	Typ.	Max.		
Frequency	0.5		6.0	GHz	Customizable
Gain	28	30	-	dB	Customizable
Gain Flatness	-	±0.8	±1.0	dB	Customizable
In/Out VSWR	-	1.50	2.20	-	Customizable
Output P1dB	+10	+12	-	dBm	Customizable
DC Power	+11	+12	+15	V@mA	@115 mA
Noise Figure	-	0.8	1.0	dB	

Absolute Maximum Ratings

Parameter	Min.	Max.	Unit	Note
Operating Temperature (Case)	-54	+85	℃	95% humidity, non-condensing
Storage Temperature (Case)	-54	+115	℃	95% humidity, non-condensing
RF Input Power	-	19	dBm	CW
Die Junction Temp (Tj)	-	+150	℃	For GaAs devices
Positive Supply Voltage		+16	V	At +V DC Pin
Negative Voltage	-	-10	V	Reverse Voltage

Typical Measured Data