

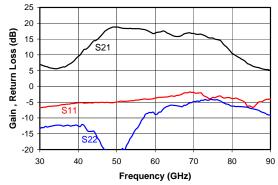
- InP Low Noise Amplifier
- Wideband operation
- 50-75 GHz

The LN3-75 is a 3 stage MMIC amplifier die fabricated using HRL's H2 InP HEMT process that is AS9100B certified. The amplifier has a common drain and gate connections and an independent gate bias for the first stage. The first stage has a user breakable air bridge to allow for an independent drain bias on the first stage.

Electrical Specifications, T_A =25°C, Vd=1.2 V, Id=24 mA, 50 Ω Input and Output

Specification	Units	Min	Тур	Max
Frequency	GHz	50		75
Gain	dB	15	18	
Input Return Loss	dB		-3	0
Output Return Loss	dB		-7	-3
Saturated Output Power	dBm		0	

Typical Gain and Return Loss Performance



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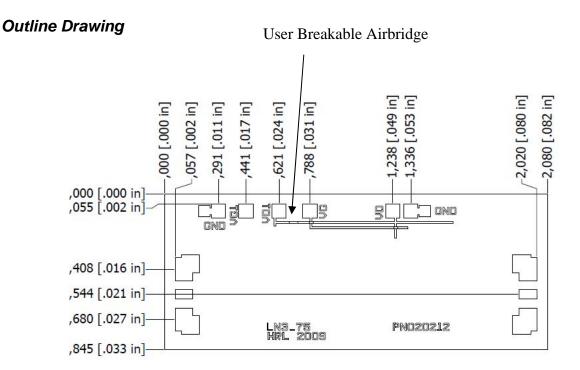
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(310) 317-5981

Table I Maximum Ratings

Symbol	Parameter	Value	Note
P _{IN}	Input Power	-10 dBm	
V_{DS}	Drain to Source Voltage	1.5 V	
V_{GD}	Gate to Drain Voltage	-2.5 to 0.2 VDC	
V_{GS}	Gate to Source Voltage	-1.0 to 0.2 VDC	
T_{M}	Die Attach Temperature (30 seconds)	290° C	



Bond pads are nominally 0.1 mm square Bond pad locations shown from die edge to pad center Die thickness is nominally 50 um

> Solid models and CAD files available at http://mmics.hrl.com

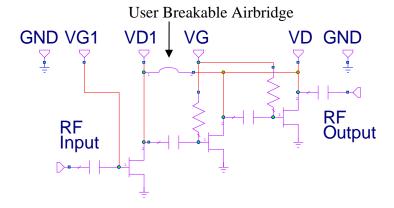
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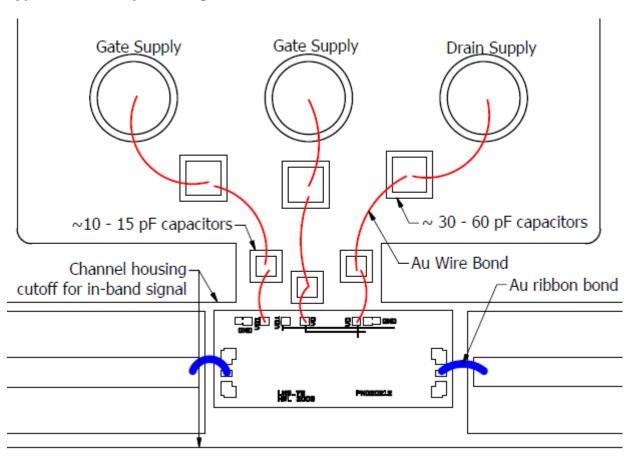
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DC Schematic



Typical Assembly Drawing



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