Ultra Low Noise K-band Amplifier

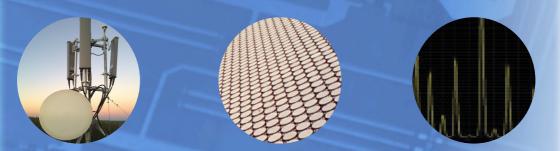
18-26GHz

CGY2121XUH/C2



Ultra Low Noise K-band Amplifier CGY2121XUH/C2

The CGY2121XUH/C2 has an exceptionally low noise figure of 1.2 dB with a very flat 19 dB of gain (+/-0.4dB). The on chip matching provides 12 dB of Input Return Loss and 11 dB of Output Return Loss. Thanks to the DC regulation the gain and noise are very stable wrt temperature change. It can be used in Radar, Telecommunication and Instrumentation applications.



The die is manufactured using OMMIC's Advanced 70 nm gate length high Indium content MHEMT Technology. The MMIC uses gold bonding pads and backside metallization and is fully protected with Silicon Nitride passivation to obtain the highest level of reliability.

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Ultra Low Noise K-band Amplifier CGY2121XUH/C2 Features

Operate Frequency Range

Flat Gain

Noise Figure

Single Positive & Negative

Supply Low Consumption

OP1dB

Robust

From 18 to 26 GHz 19dB (+/-0.4dB) overall

bandwidth < 1.5 dB on overall bandwidth

(1.2dB at 22GHz)

(+ and -1.5V)

< 92mW

> 5dBm (7dBm@22GHz)

Max +19dBm CW Input Power

1.5 x 2.0 mm

50 Ohms Input & Output MatchedInput Return Loss> 12 dB at 22GHzOutput Return Loss> 11 dB at 22GHz

Die Size



