2 Ports Corechip 26.5-30.5GHz

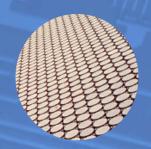
CGY2351UH/C1

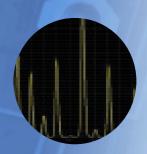


## Two Ports Corechip CGY2351UH/C1

The CGY2351UH/C1 is a high performance GaAs MMIC Core Chip operating in Ka-band following the T/R architecture; it is passive and exhibits only 2 RF ports. It includes a 6-bit Phase shifter, and a 5-bit attenuator; It has a phase shift range of 360° with a 5.62° step and attenuation range of 22 dB with 0.4dB step. It operate from 26.5 to 30.5 GHz.







The on-chip control logic with serial input register minimizes the number of bonding pads and greatly simplifies the interfacing to this device. This die is manufactured using OMMIC's 0.18  $\mu m$  gate length ED02AH PHEMT 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. This technology has been evaluated by the European Space Agency .



## Two Ports Corechip CGY2351UH/C1 Features

Operate Frequency Range
Phase Shifter 6 bits
Attenuation 5 bits
RMS Phase Error
RMS Amplitude Error
Input Matching IRL
Output Matching ORL
Supply Voltage
Total Current Consumption
Die Size

From 26.5 to 30.5 GHz

360 ° max 5.625° step

22dB max 0.7dB step

4° all states

0.5 dB all states

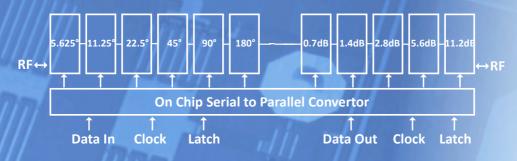
14dB

13 dB

+ 5V & -5V

17 mA

4.8 x 1.6 mm



CGY2351UH/C1 Bloc Diagram



