

[To the press:] [May 27, 2021]

Hirose Electric has developed the C.FL Series, a 0.92mm Mated Height, Ultra Small Coaxial Connector Supporting 30GHz

- Ideal for 5G Millimeter Wave Devices and CPE (Customer Premises Equipment) –

Hirose Electric has developed the C.FL Series, a 0.92mm mated height, ultra small press coaxial connector supporting 30GHz for applications with increased future demand anticipated such as 5G millimeter wave devices and CPE (Customer Premises Equipment).

● **Increasing Demand for Millimeter Wave Connectors as 5G Progresses**

Millimeter wave bands are anticipated to be used for the next generation communication standard 5G. Higher frequencies than ever before are expected to be transmitted in the internal connection between the antenna board and the main board of 5G devices and CPE (Customer Premise Equipment). Demand for connectors that secure band performance is also increasing.

● **Ultra Small with Superior High Frequency Characteristics**

Hirose Electric has developed the small coaxial connector C.FL Series which supports 30GHz in anticipation of greater millimeter wave band usage. In spite of the ultra low profile and small size with 0.92mm mated height, the frequency characteristics have been dramatically enhanced by reducing the diameter of the male receptacle contact and optimizing the internal design of the plug.

In addition, the assembly precision is dramatically improved compared to conventional products, contributing to stable transmission in the millimeter wave band. Furthermore, the applicable cable size is a very thin and flexible $\varnothing 0.64\text{mm}$ making it easy to route inside devices.

C.FL Series: 0.92mm Mated Height, Ultra Small Coaxial Connector Supporting 30GHz

1. Ultra-compact receptacle: 2mm x 2mm, 0.92mm mated height (1mm Max.)
2. Millimeter wave (30GHz) support
V.S.W.R.: 1.4 Max.: DC to 15GHz
1.5 Max.: 15 to 20GHz
1.6 Max.: 20 to 30GHz
3. Applicable cable: $\varnothing 0.64\text{mm}$
4. Probe for mass production inspection, 2.4mm connector and 2.92mm connector adaptors are available



● **Future Product Development**

The newly developed C.FL Series meets the demanding performance requirements for millimeter wave devices. As part of the product lineup, we are developing cable assembly products with a 2.4mm connector or 2.92mm connector on the other side for evaluation and measurement of 5G devices. We anticipate these cable assemblies will be used in a variety of upcoming IoT devices supporting 5G.

● **Corporate Profile and Related Information**

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| ■ Corporate Profile | https://www.hirose.com/corporate/en/about/corporate_data/ |
| ■ Product Page | https://www.hirose.com/product/series/C.FL |
| ■ Product Image | https://prd-4s-public.s3.ap-northeast-1.amazonaws.com/sys-master/public/hf2/h91/9036447973406/C_FL_image_dl.jpg |