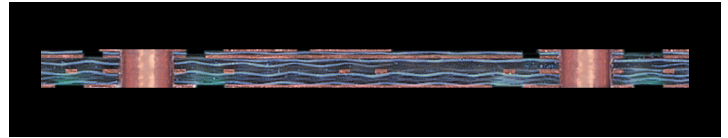


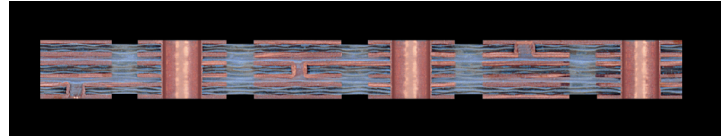
# PILLAR PC-CLAD High Frequency Multi-Layer Boards

Ideal for multi-layering of high-frequency circuits for micro to millimeter wave bands.

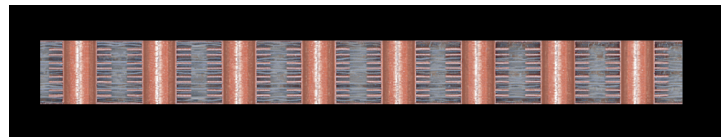
More and more devices are using high-frequency wave bands, and there is an increasing demand for multi-layer boards with superior dielectric properties. Our fluorine resin multi-layer boards (PILLAR PC-CLAD high-frequency multi-layer boards) are made with a high quality prepreg, and exhibit superior dielectric properties of fluorocarbon resin for all insulation layers. You can also set the dielectric constant for each insulation layer, and the board can handle IVH etc., thus enhancing freedom of high-frequency circuit design. PILLAR PC-CLAD boards play a vital role in reducing equipment size and can bring out new potential for high-frequency band data communications equipment of the future. Low temperature molding multi-layer boards are also available upon request.



4-layers through-hole cross-section



6-layers through-hole cross-section (BVH, IVH)



10-layers through-hole cross-section (through-hole)

## Features

### ●Low dielectric loss multi-layer board for micro to millimeter wave bands

Multi-layered with prepreg, the dielectric layers exhibit superior dielectric properties of fluorocarbon resin. Rolled copper foil as well as electrodeposited copper foil can be used for conductive layers, and you can design multi-layer boards with almost no transmission loss at high frequencies.

### ●Ideal for high-frequency, high-speed devices

You can set extremely low dielectric constants for dielectric layers. The multi-layering technology enables more compact circuits to bring out the maximum potential performance of devices.

### ●Superior heat resistance

Our prepreg multi-layer boards have heat resistance equal to that of double-sided boards, offering high reliability.

### ●IVH

You can set IVH for each core to minimize board size. Enables you to design circuits without loss of high-frequency characteristics.

## Applications

- High-frequency filter: Cellular telephone base stations, satellite cellular telephone terminals, distributors, etc.
- VCO: Cellular telephones, PHS, other high-frequency communication equipment
- Antenna: ETC antenna, wireless LAN antenna, FWA antenna, other micro to millimeter wave band antennas
- Microwave test equipment
- High-speed logic circuits and semiconductor packages
- Optical components: E/O, O/E converters
- Other high-frequency equipment and antennas

## Specifications

Dimensions : 340 x 510mm

Number of layers : 3~4

Dielectric layer thickness : 0.1mm~1.6mm

Dielectric constant : 2.2~3.0

(Extremely thin multi-layer boards with dielectric layer thickness of 30~40 $\mu$ m are available for dielectric constant of 2.6 or more.)

6- to 10-layer boards are also available.

## NIPPON PILLAR PACKING CO., LTD.



<http://www.pillar.co.jp>

Head Office: 11-48, Nonakaminami 2 Chome, Yodogawa-ku, Osaka, Japan  
Tel : 81-6-6305-1900 Fax : 81-6-6302-3300

Tokyo Office: 2-2, Uchisaiwaicho 2 Chome, Chiyoda-ku, Tokyo, Japan  
Tel : 81-3-3508-1611 Fax : 81-3-3508-1881

Nippon Pillar  
Singapore Pet, Ltd: 2 Jurong East Street 21, #05-11 IMM Building SINGAPORE 2260  
Tel : 65-568-2392 Fax : 65-568-2430