

## RIGIFLEX MANUFACTURING CAPABILITIES

According IPC-6013 Type 4 Standards

Note: for special materials, consult

### Rigiflex Use A (Static)

Flex to install using thin FR4 core.

It allows smaller holes and tracks

Do not support many flexions, lower cost.

Minimum radius: 5 mm.

FR4 core flexible part

Standard	FR4 core 100 $\mu\text{m}$ Thickness Cu 17/17 $\mu\text{m}$ , Copper ED <sup>(1)</sup> Coverlayer 25 $\mu\text{m}$ PI <sup>(2)</sup> IPC-4203/2 25 $\mu\text{m}$ Epoxy Adhesive 2 layers
Special	FR4 core 100 $\mu\text{m}$ Thickness Cu 35/35 $\mu\text{m}$ , Copper ED Coverlayer 50, 75, 100 y 125 $\mu\text{m}$ PI 50 $\mu\text{m}$ Acrylic Adhesive <sup>(3)</sup> IPC-4203/1 6 layers maximum (3 cores) adhered or separated

FR4 Rigid part

Standard	4-6 layers (flexible included)
Special	up to 18 layers (flexible included)

TOLERANCES:

| Class 7 LAB Circuits for flexible and rigid parts

<sup>(1)</sup> ED: ElectroDeposited

<sup>(2)</sup> PI: Polyimide

<sup>(3)</sup> With Acrylic adhesive, without through holes in the rigid part 1.5mm from the flexible part

## Rigiflex Use B (Dynamic)

Polyimide core and RA Copper (Rolled Annealed)

Flexible core has bigger tolerances due difficulty of processing.

Support multiple flexions, bigger cost.

With radius 3.2 mm. supports 6000 cycles (using method IPC-TM-650 2.4.3)

Polyimide flexible core

Standard	PI core 50 $\mu\text{m}$ thickness (IPC-4204/11) Cu 17/17 $\mu\text{m}$ , RA Copper <sup>(4)</sup> Coverlayer 25 $\mu\text{m}$ PI (IPC-4203/2) 25 $\mu\text{m}$ Epoxy Adhesive 2 layers (1 core)
Special	PI core 25-125 $\mu\text{m}$ thickness PI (IPC-4204/11) Cu 17-70 $\mu\text{m}$ , Copper RA or ED PI Coverlayer 50, 75, 100 y 125 $\mu\text{m}$ thickness 50 $\mu\text{m}$ Acrylic adhesive <sup>(3)</sup> (IPC-4203/1) 6 layers maximum (3 cores) adhered or separated

FR4 rigid part

Standard | 4-6 layers (flexible included)

Special | up to 18 layers (flexible included)

TOLERANCES:

Rigid part | Class 6 LAB Circuits, with minimum through hole metallized of 0.3 mm.

Flexible part | Class 5 LAB Circuits

<sup>(3)</sup> With Acrylic adhesive, without through holes in the rigid part 1.5mm from the flexible part

<sup>(4)</sup> RA: Rolled Annealed

