

Parameter of flexible circuit boards in the Flex Pool

Base material

Printed circuit boards in the Flex Pool are manufactured from Polyimide films.

The 1- or 2-layer flexible printed circuit boards have a material thickness of 0.2 mm.

The copper thickness amounts to 18 microns, the thickness of Polyimide to 50 microns.

Property	Polyimide
Tensile strength	> 165 N/mm ²
Flexural strength	> 100 cycles*
Copper adhesion	> 0,71 N/mm ²
Dielectric Constant	3,6 (1 MHz)
Withstand solder bath (°C)	288°C (> 10 s)
Moisture absorption	< 1,5 %
Expansion	< 0,2 %

* IPC-TM 650/2.4.3

Technical Parameters

Number of layers	1-2
Copper	Single-sided or double-sided
Surface	Chemical tin
Film material	Polyimide
Polyimide thickness	50 µm
Copper thickness	18 µm
Circuit board thickness	0.2 mm
Max. size of the circuit board	Length: 400 mm Width: 250 mm
Min. size of the circuit board	Length: 10 mm / Width: 35 mm
Flex cover film	Clearance: ≥ 500 µm
Min. conductor width / conductor clearance	150 µm
Vias	via diameter ≥ 300 µm
Min. via-via spacing	450 µm
Min. milling radius	500 µm
Min. copper-contour clearance	300 µm
Milling tolerance	+/- 100 µm

Layer Stackup Flex Pool

Layer: 2

Thickness: **0.2 mm without Stiffener**

