

Stickleback Manufacturing Ltd

UK Manufacturing Capability Worksheet



Feature	FR4		MPCB
	Standard	Advanced	
Acceptance Standard	IPC-A-600 Class 2	IPC-A-600 Class 3	As per FR4
Base Material	Standard Tg	High Tg, High CTI, Halogen Free	Aluminium, Copper 0.4 to 8 W/mk
Layer Count	1 - 12	13 - 24	1 - 8* <i>*post bonded</i>
Finished Board Thickness (mm)	0.5 - 2.4	> 2.4	0.5 - 3.2
Minimum Inner Layer Core Thickness	0.15	.10	-
Maximum Board Size (mm)	1 to 2 layer = 2500 x 635 (98.42" x 25") Multilayer= 362 x 417 (14.25" x 16.43")	-	Single layer= 590 x 437 Post Bonded = 265 x 420
Finished Copper Thickness (surface)	35um to 105um	< 35um > 105um	-
Copper Thickness (hole)	20um	25um	20um* <i>*post bonded PTH</i>
Minimum Track & Gap	18um = 0.15mm ----- 35um = 0.20mm ----- 70um = 0.25mm ----- 105um = 0.35mm	18um = 0.10mm ----- 35um = 0.15mm ----- 70um = 0.20mm ----- 105um = 0.30mm	As per FR4
Minimum Drilled Hole Size (mm)	0.25 (upto 1.6 thk mtl) 0.40 (1.6 - 2.4 thk mtl) 0.50 (2.4 - 3.2 thk mtl)	0.20 (upto 1.6 thk mtl) 0.30 (1.6 - 2.4 thk mtl) 0.40 (2.4 - 3.2 thk mtl)	As per FR4 for post bonded PTH
Aspect Ratio	6:1	8:1	As per FR4 for post bonded PTH
General Tolerances (mm)	Plated Thru Hole = +/- 0.10 ----- Unplated Hole = +/- 0.05 ----- Routed Features = +/- 0.15	Plated Thru Hole = +/- 0.05 ----- - ----- Routed Features = +/- 0.10	As per FR4
V-Score Tolerances (mm)	Score line to circuit pattern = +/- 0.25 Score line to score line = +/- 0.15 Min gap from copper edge to centre of score line = 0.50		As per FR4