LaserVia™ Drilling Centers, LLC

"Putting vias in SMD pads - where they belong"

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The Aramid Evaluation Chart

Standard FR4	Aramid outer layer with FR4 inner layers	100% Aramid construction
Dielectric constant Dk = 4.3 - 4.8 Epoxy FR4 - FR5	**Dielectric constant** Dk = 3.9 - 4.2 Epoxy FR4 - FR5	**Dielectric constant** Dk = 3.1 - 3.9 Cyanate Ester-Polyimide-Epoxy FR5
Hole formation†: - *Drilling* diameter 0.3 mm	**Hole formation†:** - *Drilling* diameter 0.3 mm - *Plasma ablation* appr. 80 µm deep - *Laser ablation* appr. 200 µm deep through Aramid only, diam. 0.1 mm	**Hole formation†:** - *Drilling* diameter 0.3 mm - *Plasma ablation* appr. 80 µm deep - *Laser ablation* appr. 300 µm deep diam. 0.1 mm
Dimensional stability Standard = 14 -18 ppm/K	**Dimensional stability** Improved = 11 -13 ppm/K	**Dimensional stability** Improved = 7 -9 ppm/K