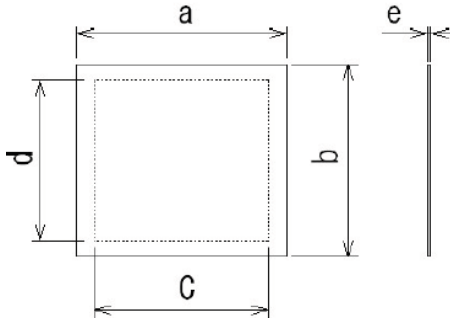
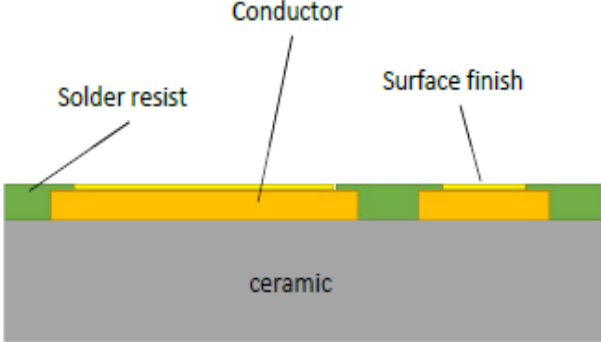


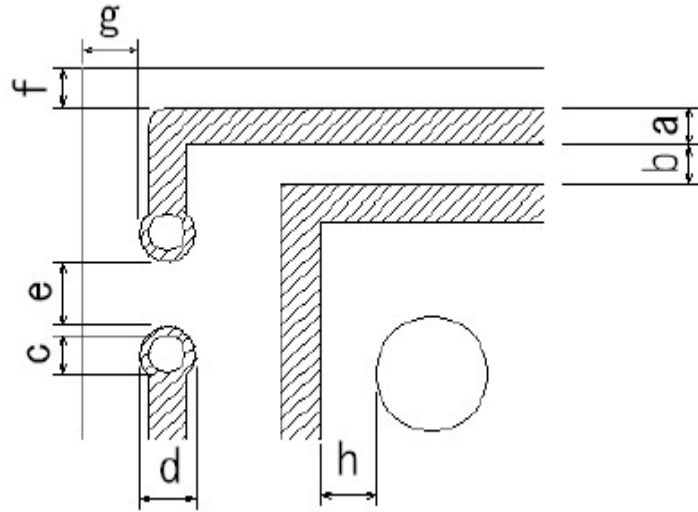
Volume Manufacturing Process – Aluminium Nitride AlN		Prototypes & Low Volume <50 panels / order (DPC)	Medium & High Volume >50 panels / order (DPC)	
Dimensions & Thickness				
	Panel Dimensions (a)x(b)			
	Standard	metric	114mm x 114mm	114mm x 114mm
	Special		Up to 140mm x 150mm	Up to 140mm x 150mm
	Standard	imperial	4.5" x 4.5"	4.5" x 4.5"
Special		Up to 5.5" x 5.9"	Up to 5.5" x 5.9"	
Thickness (e)				
Standard	metric	0.38 / 0.5 / 0.63 / 1.0 / 1.5 / 2mm	0.38 / 0.5 / 0.63 / 1.0 / 1.5 / 2mm	
Special				
Standard	imperial	15 / 20 / 25 / 39 / 59 / 79 mil	15 / 20 / 25 / 39 / 59 / 79 mil	
Special				
Metallisation & Finish				
	Conductor			
	Standard		Copper – Cu	Copper – Cu
	Special			
	Conductor Thickness			
	Standard	metric	35µm - 70µm	35µm - 70µm
	Special		18µm	18µm
	Standard	imperial	1oz – 2oz	1oz – 2oz
	Special		0.5oz	0.5oz
	Surface finish			
	Standard		Immersion Silver, ENIG, ENEPIG	Immersion Silver, ENIG, ENEPIG
Special		IPIG (no nickel), please enquire	IPIG (no nickel), please enquire	
Solder resist				
Standard		Green, Black, White	Green, Black, White	
Special		Other – please enquire	Other – please enquire	
Silk screen / legend				
Standard		Black, white	Black, white	
Layers				
Standard		Singe – double sided	Singe – double sided	
Special				

Volume Manufacturing Process – Aluminium Nitride AlN

**Prototypes & Low Volume
<50 panels / order (DPC)**

**Medium & High Volume
>50 panels / order (DPC)**

Spacing & Vias



Min. line width (a)		
Standard	0.2mm / 8 mil	0.2mm / 8 mil
Special	0.1mm / 4 mil	0.1mm / 4 mil
Min. line width (b)		
Standard	0.2mm / 8 mil	0.2mm / 8 mil
Special	0.1mm / 4 mil	0.1mm / 4 mil
Line/pad to edge spacing (f)		
Standard	0.2mm / 8 mil	0.2mm / 8 mil
Special	0.1mm / 4 mil	0.1mm / 4 mil
Via Specifications		
Via diameter (c)	0.08mm / 3 mil	0.08mm / 3 mil
Min. via spacing (b)	0.15mm / 6 mil	0.15mm / 6 mil
Via/hole to edge spacing	3 x via diameter	3 x via diameter
Through hole metallisation	Plated through hole (PTH)	Plated through hole (PTH)
Annular ring specifications		
Min. annular ring diameter (d)	0.10mm / 4 mil	0.10mm / 4 mil
Min. annular ring spacing (e)	0.10mm / 4 mil	0.10mm / 4 mil
Annular ring to edge spacing (g)	0.15mm / 6 mil	0.15mm / 6 mil
Line to hole/via spacing (h)		
Standard	0.15mm	0.15mm
Special	0.2mm / 8 mil	0.2mm / 8 mil
Special	0.1mm / 4 mil	0.1mm / 4 mil

Tolerance



Dimensional tolerance		
Standard	+/- 100µm / 4 mil	+/- 100µm / 4 mil
Special	+/- 50µm / 2 mil	+/- 50µm / 2 mil
Thickness tolerance		
Standard	+/- 10%	+/- 10%
Special	+/- 5%	+/- 5%
Hole tolerance		
Standard	+/- 100µm / 4 mil	+/- 100µm / 4 mil
Special	+/- 50µm / 2 mil	+/- 50µm / 2 mil
Pad to hole/via tolerance		
Standard	+/- 100µm / 4 mil	+/- 100µm / 4 mil