

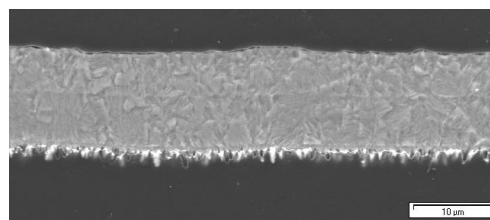


BF-TZA-FX

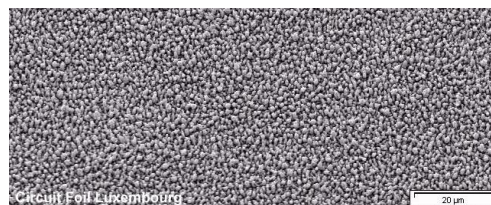
Technical Characteristics

BF-TZA-FX style foil is an ultra-flat single side treated electro-deposited copper foil, characterized by a very high ductility at room temperature.

The zinc free and arsenic free copper treatment is designed to provide excellent bond strength on flexible substrates like 2-layer polyimide FCCL.



Cross section
12 µm BF-TZA-FX
Treated matte side



Typical average properties*

BF-TZA-FX							
MEASURED PARAMETERS	UNITS	PRODUCT GAUGE				IPC	
Nominal Thickness	µm oz.	9 1/4	12 3/8	18 1/2	35 1	Specification IPC-4562A	Test Method IPC-TM-650
Area Weight	oz/ft ² g/m ² g/254 in ²	0.26 79 12.9	0.37 112 18.4	0.50 152 24.9	0.93 285 46.7	(a)1.2.5, table 1-1 (b)3.4.4 (c)4.6.3	2.2.12
Untreated Side Roughness (Ra)		≤ 0.35 (≤ 14)				3.5.6	2.2.17
Treated Side Roughness	Ra	0.3 – 0.55 (12 - 22)				-	
	Rz (ISO)	≤ 3.1 (≤ 122)				3.4.5	
	Rz (JIS)	≤ 2.5 (≤ 98)				-	
	Rt	≤ 3.7 (≤ 146)				-	
Tensile Strength Transverse at RT	MPa (k.Lb/in ²)	≥ 207 (≥ 30)			≥ 276 (≥ 40)	3.5.1	2.4.18
Tensile Strength Transverse at 180 °C		≥ 103 (≥ 15)			≥ 138 (≥ 20)		
Elongation Transverse at RT	%	4 - 10	5 - 20	7 - 25	10 - 30	3.5.3	
Elongation Transverse at 180 °C		5 - 25	9 - 25	10 - 35	10 - 40		
Peel Strength (RT) FR4 halogen free ⁽¹⁾	N/mm (Lb/in)	≥ 0.7 (≥ 4.0)				3.5.4	2.4.8
High Temp. Tarnish Resistance	-	60 min @ 180 °C in air: pass				-	
Solderability	-	Complies with IPC specification				3.6.3	2.4.12

⁽¹⁾ Laminate construction with thickness ≥ 0.5 mm

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* All of this Technical Information has been determined with due care and thoroughness. However, because the conditions of use and process and application technologies employed can substantially vary, the provided data and figures can only serve as non-binding guidelines. They do not constitute a guarantee that the purchased item will possess certain attributes. For this reason, no liability whatsoever can be assumed for them. The buyer is obliged to check the suitability of all supplied products.