

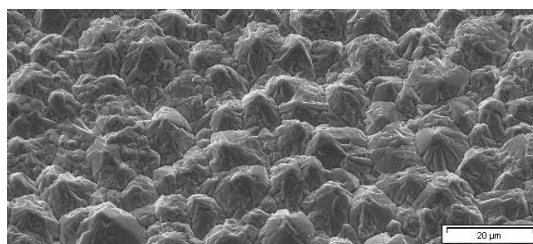


TZA-B-FX

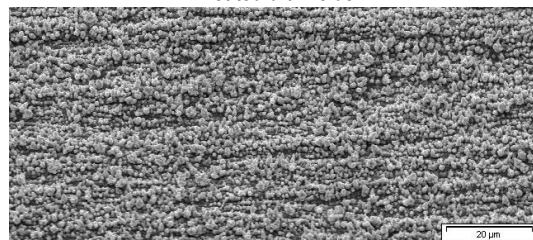
Technical Characteristics

TZA-B-FX foil is a so-called "Reverse Treated Foil" with zinc free and arsenic free treatment characterized by enhanced high temperature elongation properties [IPC-Grade 3] and thermally stable microstructure.

The foil exhibits an excellent adhesion to a broad range of flexible substrates for 2-layer and 3-layer FCCL. After thermal stress, this product is showing best bond retention.



Untreated matte side



Treated drum side

Typical average properties*

TZA-B-FX						
MEASURED PARAMETERS	UNITS	PRODUCT GAUGE			IPC	
Nominal Thickness	μm oz.	12 3/8	18 1/2	35 1	Specification IPC-4562A	Test Method IPC-TM-650
Area Weight	oz/ft ²	0.34	0.50	0.93	(a)1.2.5, table 1-1	2.2.12
	g/m ²	105	152	283	(b)3.4.4	
	g/254 in ²	17.2	24.9	46.4	(c)4.6.3	
Untreated Matte Side Roughness (Rz)	ISO	μm ($\mu\text{.inch}$)	≤ 5.1 (≤ 201)	≤ 6.0 (≤ 236)	≤ 9.0 (≤ 354)	2.2.17
	JIS		≤ 4.2 (≤ 165)	≤ 5.0 (≤ 197)	≤ 7.5 (≤ 294)	
Treated Side Roughness (Rz)	ISO	μm ($\mu\text{.inch}$)	≤ 5.1 (≤ 201)			3.4.5
	JIS		≤ 4.2 (≤ 165)			-
Tensile Strength Transverse at RT	MPa (k.Lb/in ²)	≥ 276 (≥ 40)			3.5.1	2.4.18
Tensile Strength Transverse at 180 °C		≥ 138 (≥ 20)				
Elongation Transverse at RT	%	≥ 3	≥ 6		3.5.3	
Elongation Transverse at 180 °C		≥ 2	≥ 3			
Peel Strength Treated Shiny Side (RT) on halogen-free prepreg ^[1]	N/mm (Lb/in)	≥ 0.7 (≥ 4.0)	≥ 0.75 (≥ 4.3)	≥ 0.8 (≥ 4.6)	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.