

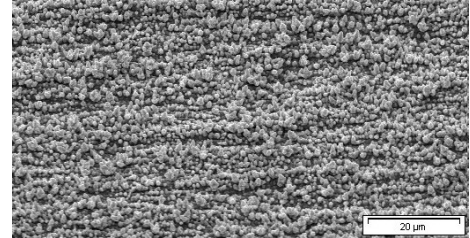
**REVERSE TREATED COPPER FOIL WITH AN EXCELLENT BOND ON A BROAD RANGE OF FLEXIBLE SUBSTRATES FOR 3-LAYER FCCL.**

IPC  
Grade 3



**TYPICAL SUBSTRATES**

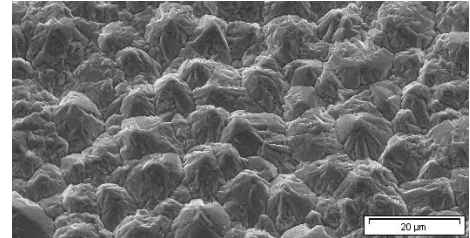
Polyimide and polyester resin systems.



Treated Drum Side

**TYPICAL PROCESSES**

Lamination on a polyimide or polyester film coated with an adhesive to form a 3-layer flexible copper clad laminate.



Untreated Electrolyte Side

**TYPICAL APPLICATIONS**

Smartphones, tablets, laptops.

**TYPICAL AVERAGE PROPERTIES\***

TZA-B-FX							
MEASURED PARAMETERS	UNITS	PRODUCT GAUGE				IPC	
Nominal Thickness	µm oz.	12 3/8	18 1/2	35 1	70 2	Specification IPC-4562A	Test Method IPC-TM-650
Area Weight	g/m <sup>2</sup>	106	152	283	577	3.4.4	2.2.12
Untreated Matte Side Roughness (Rz)	JIS	≤ 4.2	≤ 5.0	≤ 7.5	≤ 9.2	-	2.2.17
	ISO	≤ 5.1	≤ 6.0	≤ 9.0	≤ 11.0	3.4.5	
Treated Side Roughness (Rz)	JIS	≤ 4.2				-	2.4.18
	ISO	≤ 5.1				3.4.5	
Tensile Strength Transverse (RT)	MPa (k.Lb/in <sup>2</sup> )	≥ 276 (≥ 40)				3.5.1	2.4.18
Tensile Strength Transverse (180 °C)		≥ 138 (≥ 20)					
Elongation Transverse (RT)	%	≥ 3	≥ 6	≥ 9	≥ 12	3.5.3	2.4.8
Elongation Transverse (180 °C)		≥ 2					
Peel Strength Treated Shiny Side FR4 halogen free prepreg <sup>(1)</sup> (RT)	N/mm (Lb/in)	≥ 0.7 (≥ 4.0)	≥ 0.75 (≥ 4.3)	≥ 0.8 (≥ 4.6)		3.5.4	2.4.8

<sup>(1)</sup> Laminate construction with thickness ≥ 0.5 mm

**ALTERNATIVE**

For 2-layer FCCL (greater flexibility) please consult SR-TZA-B-FX and BF-TZA-FX datasheets.

\* 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.