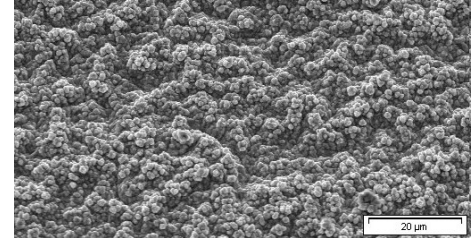


HIGH TENSILE AND LOW PROFILE COPPER FOIL.

IPC
Grade 3

TYPICAL SUBSTRATES

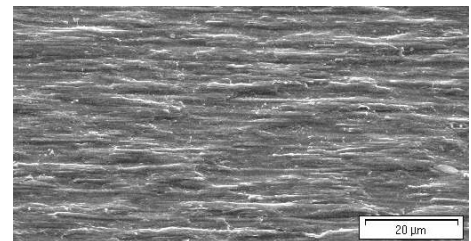
Carrier substrates.



Treated Electrolyte Side

TYPICAL PROCESSES

Reel-To-Reel colamination process.
High mechanical properties ensure a perfect flatness of the foil inside the chip window.



Untreated Drum Side

TYPICAL APPLICATIONS

Chip cards and IC card modules.

TYPICAL AVERAGE PROPERTIES*

LPT-YE							
MEASURED PARAMETERS	UNITS	PRODUCT GAUGE				IPC	
Nominal Thickness	μm	18	32	35	70	Specification IPC-4562A	Test Method IPC-TM-650
	oz.	1/2	1	1	2		
Area weight	g/m ²	152	283	327	603	3.4.4	2.2.12
Untreated Side Roughness (Ra)		≤ 0.40				3.5.6	2.2.17
Treated Side Roughness (Rz)	JIS	3.3 - 5				-	
	ISO	4 - 6				3.4.5	
Tensile Strength Transverse (RT)	MPa (k.Lb/in ²)	≥ 379 (≥ 55)				3.5.1	2.4.18
Tensile Strength Transverse after 2 h at 160 °C (RT)		≥ 345 (≥ 50)				-	
Elongation Transverse at RT	%	≥ 8	≥ 10		≥ 15	3.5.3	
Yield Strength after 2 h at 160 °C (RT)	MPa (k.Lb/in ²)	≥ 250 (≥ 36)				-	
Peel Strength FR4 ^[1] (RT)	N/mm (Lb/in)	≥ 1.0 (≥ 5.7)	≥ 1.4 (≥ 8.0)		≥ 1.6 (≥ 9.1)	3.5.4	2.4.8

^[1] Laminate construction with thickness ≥ 0.5 mm

* 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.