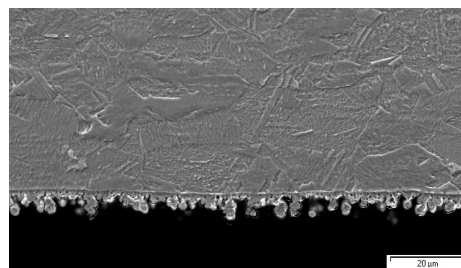


# 400 $\mu\text{m}$ treated RA copper foil

## Technical Characteristics

400  $\mu\text{m}$  RA copper foil with arsenic free and zinc free very low profile copper treatment.



Cross section 400  $\mu\text{m}$   
Treated side

## Typical average properties\*

400 $\mu\text{m}$ treated RA copper foil		
MEASURED PARAMETERS	UNITS	VALUES
Copper Type	-	RA copper foil: Cu-OF / CW008A / C10200
Area Weight	$\text{g}/\text{m}^2$	$3480 \pm 10 \%$
Calculated Thickness	$\mu\text{m}$	$390 \pm 10 \%$
Purity	%	$\geq 99.9$
Density	$\text{g}/\text{cm}^3$	8.92 - 8.94
Specific Heat	$\text{J}/(\text{kg}\cdot\text{K})$	385
Hardness	HV	70 - 95
Tensile Strength at RT	$\text{N}/\text{mm}^2$	250 - 350
Elongation at RT	%	$\geq 12$
Yield strength at RT	$\text{N}/\text{mm}^2$	180 - 280
Resistivity (mass)	$\Omega\cdot\text{g}/\text{m}^2$	$\leq 0.1532$
Resistivity (vol)	$\Omega\cdot\text{mm}^2/\text{m}$	$\leq 0.0171$
Thermal conductivity	$\text{WK}/\text{m}$	390
Treated Side Roughness	Ra	0.5 - 0.9
	Rq	0.7 - 1.1
	Rz(ISO)	$\leq 5.1$
Not Treated Side Roughness	Ra	0.1 - 0.2
	Rq	0.1 - 0.3
	Rz(ISO)	1.0 - 1.4
Peel Strength (RT) FR4 <sup>(1)</sup>	$\text{N}/\text{mm}$ (Lb/in)	$\geq 2.0$ ( $\geq 11.4$ )
High Temp. Tarnish Resistance (not treated side)	-	30 min @ 200 °C in air: pass
Solderability	-	Complies with IPC specification
Unique sheet size (L x T)	mm	1270 x 1100
Treated surface size (typically)		1270 x 1060

<sup>(1)</sup> Laminate construction with thickness  $\geq 0.5$  mm and copper aft. down-etching to 30 - 50  $\mu\text{m}$

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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.