

Description

OhmegaPly VSP RCM is a Nickel Phosphorus thin film metal alloy electro-deposited on a very low-profile copper foil. Typical treatment side roughness (Rz) of very low-profile base copper foil is 1.5µm. It is primarily used in high frequency applications.

OhmegaPly VSP RCM Product Matrix

COPPER TYPE	SHEET RESISTIVITY (OHMS PER SQUARE)				
VSP GRADE	10	25	50	100	250
½ oz (18 µm)	0.5A10VSP	0.5A25VSP	0.5A50VSP	0.5A100VSP	0.5A250VSP
1 oz (35 µm)	1A10VSP	1A25VSP	1A50VSP	1A100VSP	1A250VSP

Table 1: Ohmega material offerings on VSP very low-profile base copper

Representative Base Copper Foil Data

Grade	Thickness (µm)	Area Weight (g/m ²)	Rz (µm)	Tensile Strength (kg/mm ²)	Elongation (%)	Peel Strength (kg/cm)
HS1-VSP	18	153	1.5	40.0	8.0	0.8 ⁽¹⁾
	35	285	1.5	38.0	16.0	1.0 ⁽¹⁾

Table 2: Representative Data. (1) Base copper foil peel strength on FR4 substrate

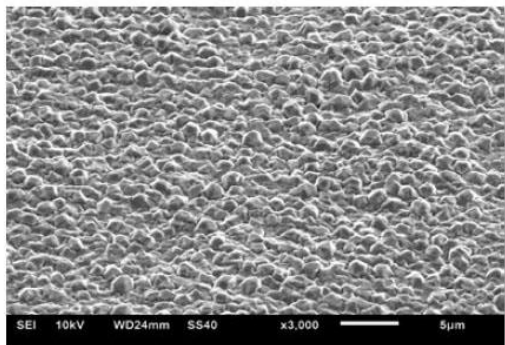


Figure 1: VSP base copper foil matte side

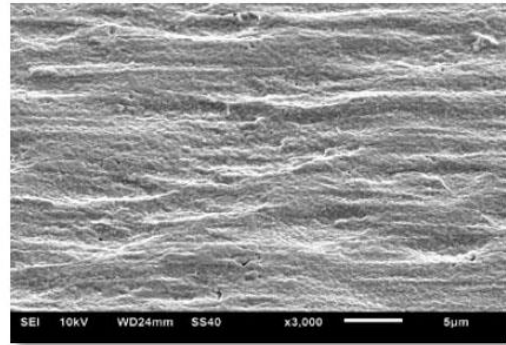


Figure 2: VSP base copper foil drum side

OhmegaPly[®] VSP RCM Technical Snap-Shot

Sheet Resistivities	10 Ω/□	25 Ω/□	50 Ω/□	100 Ω/□	250 Ω/□	Unit	Remark and Condition
Material Tolerance	+/-5	+/-5	+/-5	+/-5	+/-10	%	Sheet Resistivity
Power Load Test	230	175	165	140	115	mW	Based on 0.50mm x 0.25mm resistor size on FR4.
RTC	< 25	< 50	< 50	< 100	< 100	PPM/°C	MIL-STD-202-304, -55°C to 125°C
Solder Float	0.5	0.5	0.5	1.0	1.0	Δ R%	MIL-STD-202-210D, 288°C, 10 sec, 3x

Table 3: OhmegaPly VSP RCM representative data, not a guarantee

* OhmegaPly RCM[®] and or OhmegaPly[®] Laminate is exported from the United States in accordance with the Export Administration regulations. Diversion contrary to United States law prohibited.