



Description: POLYONICS XF-565 is a polyimide film with a permanent pressure sensitive acrylic adhesive and a high opacity, matte white topcoat specifically designed for thermal transfer printing. It can also be printed with ink jet, dot matrix impact, laser, and digital printing technologies.

Use: POLYONICS XF-565 is designed for barcode or alphanumeric identification of printed circuit boards, or related electronic components. It is the ideal label to withstand surface mount board processes, on either the top or bottom side of the board. It can also be used on the top side of the board in mixed processes, and is recommended for the bottom side which is directly exposed to the wave solder environment.

Properties: Labels printed with XF-565, in combination with the appropriate thermal transfer ribbon, resist the harsh chemicals, cleaners, and saponifiers used in PCB manufacturing; moreover, the labels resist smearing, even when the board and label are directly removed from a reflow or wave solder environment.

Properties	Test Method	Average Results	
		USA Units	SI Units
Thickness	ASTM D1000		
-Substrate		0.0027 inch	0.068 mm
-Adhesive		0.0020 inch	0.050 mm
-Total		0.0047 inch	0.118 mm
Adhesion	Polyonics 80313		
-Stainless Steel	20 minute dwell	≥ 35 oz/in	38N/100 mm
	24 hour dwell	≥ 40 oz/in	44N/100 mm
Tack	Polyonics 80155		
		≥ 1200 g/in	
Temperature Rating:	-40 to 1000°F (-40 to 537°C)		
Shelf Life	1 year below 80°F (27°C) and 60% R.H.		
UL File #	PGJ12.MH19503		
UL Tested Ribbons	Ricoh B110A		

All SI units are mathematically derived from U.S. conventional units.

Note. All values shown are averages and should not be used for specification purposes. Adhesion and tack values have a 10% tolerance allotted to the above stated values. Test data and test results contained in this document are for general information only and shall not be relied upon by POLYONICS customers for designs and specifications, or be relied on as meeting specified performance criteria. Customers desiring to develop specifications or performance criteria for specific product applications should contact POLYONICS for further information.

Labels printed with recommended thermal transfer ribbon. Labels printed with 6.7 mil X dimension bars at 2:5 ratio. Labels exposed to indicated environment:

Properties	Test Method	Test Environment	PCS ¹	Read Rate ²
Heat/Chemical Resistance	Polyonics	Control, 230°C heat, 5 min.	99%	100%
		Kyzen Corp. Aquanox SSA 30% aqueous, 40-45°C, 5 min.	100%	99%
		Re-Entry KNI 2000 Terpene, 40-45°C, 5 min.	98%	100%
		Alpha Metals Inc. EC-7R Terpene, 40-45°C, 5 min.	98%	100%
		Alpha Metals inc. 2110 Saponifier 10% aqueous, 65-70°C, 5min.	97%	100%
		Isopropanol 99%, 65-70°C, 5 min.	99%	100%

¹PCS - Print Contrast Signal. PCS determined with Quick Check 650, 0.005" aperture, 660 nm wavelength. Quick Check 650 manufacture by : Photographic Sciences Corp.

² Read rate determined using PSC 850 laser scanner.

Properties	Test Method	Test Fluid	Results
Chemical Resistance	MIL-STD-202F, Notice 12, Method 215J	Solvent A- 1 part IPA, 3 parts Mineral Spirits	No visible effect
		Solvent B- 1,1,1 Trichloroethane	Solvent deleted per notice 12
		Solvent C- Terpene Defluxer	No visible effect
		Solvent D- Saponifier	No visible effect

References:

ASTM: American Society for Testing and Materials (U.S.A.)
 SI: International Systems of Units.

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 EC-7R™ is a trademark of Petroferm Inc.
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