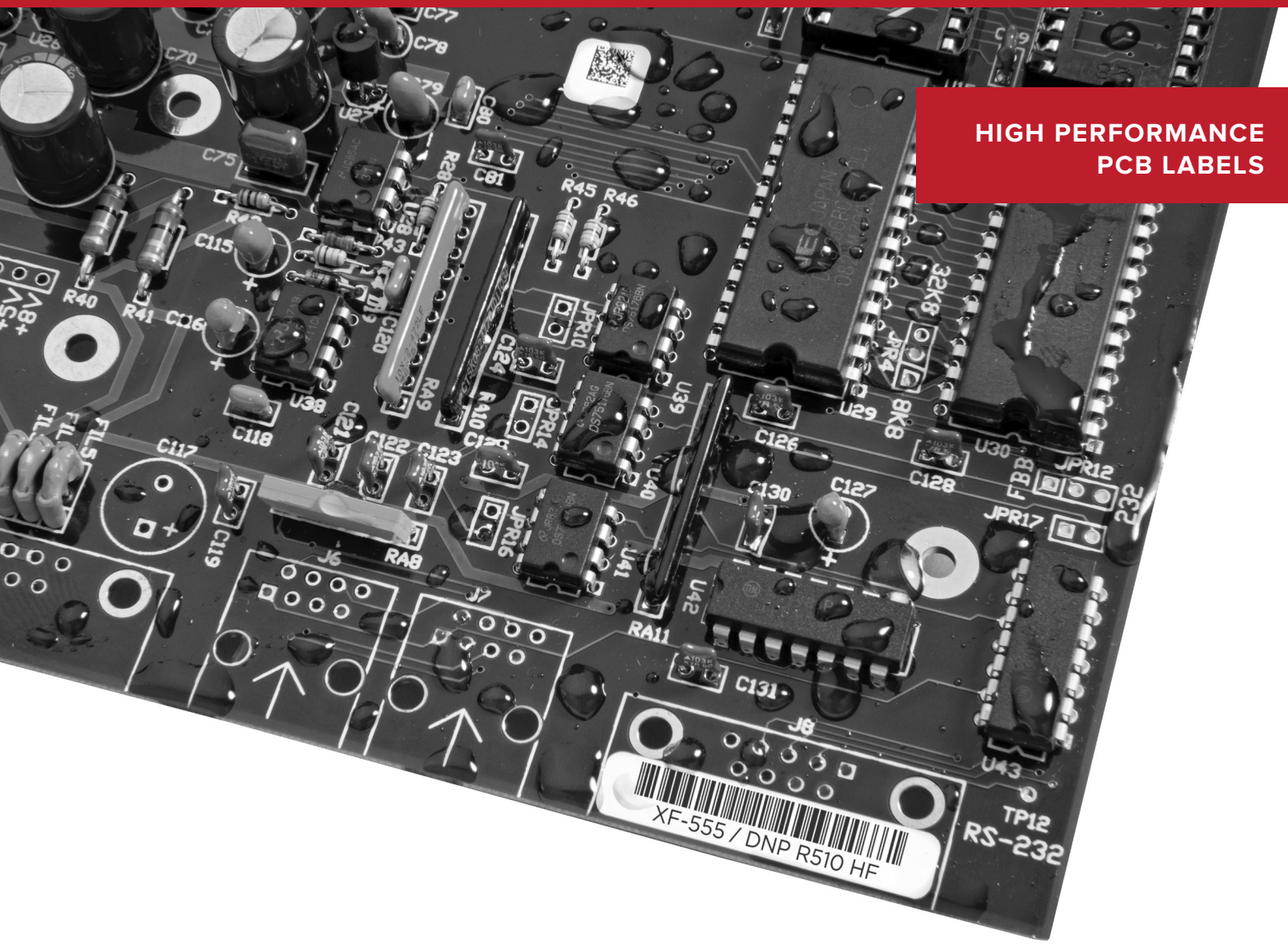
HIGH PERFORMANCE
PCB LABELS



POLYONICS®
Personal Chemistry

HIGH PERFORMANCE LABELS

FOR TODAYS ELECTRONICS MANUFACTURERS

Polyonics XF-731 label (top) retains original contrast and readability compared to competition (bottom) post wave solder and ORH1 flux exposure.

THE MOST DURABLE LABELS FOR DEMANDING PCB MANUFACTURERS

PCB manufacturers use multi-pass, high temperature reflow or wave soldering processes to join the myriad of electrical connections on their PCBs. The processes involve pre-heat and thermal soaks along with highly active (ORH1) fluxes and high pressure chemical washes. Due to the severity of these processes, manufacturers demand the most durable label materials available to accurately track their boards and components.

NEXT GENERATION LABEL MATERIALS

Polyonics® understands the intricacies of PCB manufacturing and designs and manufactures label materials specifically for these harsh environments. Our durable REACH & RoHS compliant tracking labels maintain the integrity of printed bar codes and images throughout the harshest, multi-cycle PCB manufacturing processes, helping manufacturers accurately control their PCB inventories from production through to customer deliveries.

LEVERAGING OVER 20 YEARS OF R&D TO DELIVER THE INDUSTRY'S BEST LABELS

Our materials have remained at the forefront of PCB label technology for over 20 years through vigorous R&D programs, rigorous testing, and continuous evaluation and benchmarking by leading PCB and component designers and manufacturers worldwide.

GUARDING AGAINST HIGH TEMPERATURES

Our dimensionally stable PCB label materials are engineered with ThermoGard technology to exceed the high temperature requirements of today's most advanced reflow and wave solder processes.

TOPPING IT OFF WITH CHEMICAL RESISTANCE

Our next generation, non-yellowing, non-softening coatings are applied to our label materials to resist abrasion if contacted at elevated temperatures and withstand highly corrosive, highly active fluxes. The result is high contrast barcodes that remain readable post heat.

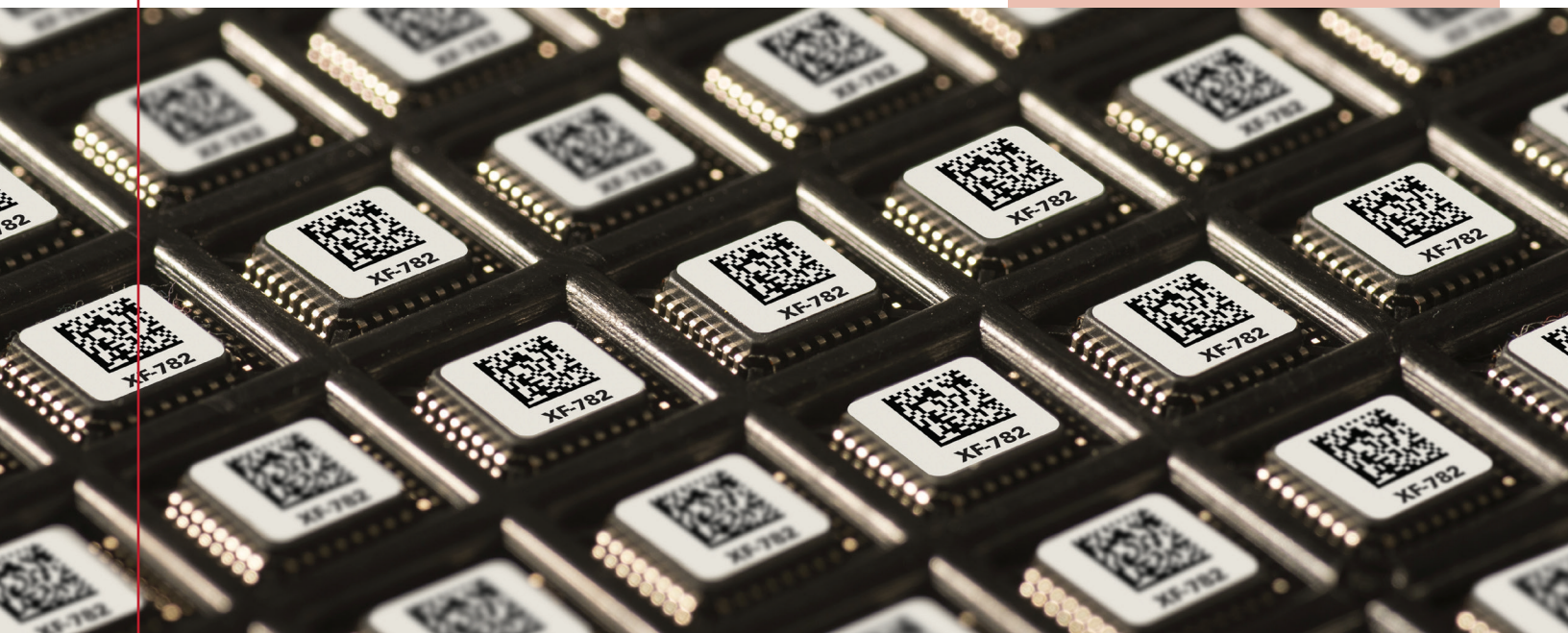
PERMANENTLY AFFIXED

The PCB label materials are engineered with aggressive pressure sensitive adhesives (PSAs) that allow the labels to remain firmly affixed through multiple passes in extreme temperatures and fully resistant to the most concentrated cleaning chemistries.

Our PCB label materials are available in 1 and 2 mil thicknesses, in a variety of finishes and with a wide selection of aggressive PSAs to meet the unique specifications of various industry, military and ASTM standards.

HIGH TEMPERATURE APPLICATIONS

- PCB identification
- Electronic component tracking
- Asset tracking
- Warranty labeling



POLYONICS PCB LABEL PRODUCT LINE

Film	Product	Finish	Adhesive	ORH1 Highly Active Flux Resistant	ESD Safe*	Flame Retardant (UL94 VTM-0)	Temperature	Reach and RoHS Compliant	UL 969 Recognized
1 mil (25 µm) Polyimide	**XF-500**	Semi-gloss yellow	1 mil (25 µm) Acrylic				100 hrs at 302 °F (150°C) 5 min at 500 °F (260 °C) 90 sec at 572 °F (300 °C)	✓	✓
	XF-504	Semi-gloss blue	1 mil (25 µm) Acrylic					✓	✓
	XF-505	Semi-gloss green	1 mil (25 µm) Acrylic					✓	✓
	XF-518	Matte white	1 mil (25 µm) Acrylic					✓	✓
	XF-528	High gloss white	1 mil (25 µm) Acrylic					✓	✓
	XF-581	Semi-gloss white	1 mil (25 µm) Acrylic					✓	✓
	XF-583	Matte white	1 mil (25 µm) Acrylic					✓	✓
	XF-603	Semi-gloss white	1.1 mil (28 µm) Acrylic			✓		✓	✓
	XF-731	Semi-gloss white	1 mil (25 µm) Acrylic	✓				✓	✓
	XF-781	Semi-gloss white	1 mil (25 µm) Acrylic		✓			✓	✓
	XF-784	Matte white	1 mil (25 µm) Acrylic		✓			✓	✓
2 mil (50 µm) Polyimide	**XF-519**	Matte white	1.5 mil (38 µm) Acrylic					✓	✓
	XF-520	Semi-gloss yellow	2 mil (50 µm) Acrylic					✓	✓
	XF-524	Semi-gloss blue	2 mil (50 µm) Acrylic					✓	✓
	XF-525	Semi-gloss green	2 mil (50 µm) Acrylic					✓	✓
	XF-529	High gloss white	1.5 mil (38 µm) Acrylic					✓	✓
	XF-541	Matte "buff" color	2 mil (50 µm) Acrylic					✓	✓
	XF-552	High gloss yellow	2.4 mil (61 µm) Acrylic					✓	
	XF-555	High gloss white	2 mil (50 µm) Acrylic					✓	✓
	XF-582	Semi-gloss white	2 mil (50 µm) Acrylic					✓	✓
	XF-584	Matte white	2 mil (50 µm) Acrylic					✓	✓
	XF-592	Semi-gloss white	2.4 mil (61 µm) Acrylic					✓	✓
	XF-732	Semi-gloss white	2 mil (50 µm) Acrylic	✓				✓	✓
	XF-782	Semi-gloss white	2 mil (50 µm) Acrylic		✓			✓	✓
1.5 mil (38 µm) Polyester	**XF-611**	Semi-gloss white	1.1 mil (28 µm) Acrylic			✓	-40 °F to 302 °F (-40°C to 150 °C)	✓	✓
2 mil (50 µm) Polyester	**XF-446**	Gloss White	1 mil (25 µm) Acrylic		✓		100 hrs at 302 °F (150°C) *Operating:* -40 to 400 °F (-40 to 204 °C)	✓	✓

* Static Dissipative & Low-Charging

** Recommended thermal transfer ribbons included on technical data sheets.

For additional technical information, please contact us at **603.352.1415** or **info@polyonics.com**

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RoHS Compliant
SJ/T11364-2006 & EU2002/95/EC 2003/11/EC 76/69/EEC

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