

Technical Data Sheet 2 Mil Green Polyimide - 767

Description: Polyimide film with a high-temperature permanent pressure sensitive acrylic adhesive and a high opacity, green tinted topcoat specifically designed for barcode or alphanumeric identification of printed circuit boards, or related electronic components using thermal transfer printing.

Uses: Specially designed for high-temperature-lead-free solder applications. 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 that is directly exposed to the wave solder environment.

Properties: The 767 topcoat, in combination with the appropriate thermal transfer ribbon, passes the requirements of **MIL-STD-202F, Notice 12, Method 215J and MIL-STD-883E, Notice 4, Method 2015.13**. The print resists smearing, even when the board and label are directly removed from a reflow or wave solder environment. Preheating the labeled product can further enhance print permanence in the case of extreme solvent and/or abrasion exposure, although this is not typically required for board processing applications.

Recommended Ribbon: Recommended ribbons for Thermal Transfer printing both for maximum durability and resistance to Fluxes and Cleaners are Nortec's 140 and 103 series.

**Thickness:
(ASTM D1000)**

	USA Units (In)	SI Units (mm)
Substrate	0.0024	0.061
Adhesive	0.0020	0.050
Liner	0.0032	0.081
Total	0.0076	0.192

Adhesion:

Test Method: ASTM D-3330 (stainless Steel).

		USA Units (oz/In)	SI Units (N/100mm)
Stainless steel (ASTM D3330)	20 minute dwell	35 oz/In	48
	72 Hour Dwell	43 oz/In	90
Tack (ASTM D2979)	Polyken™ Probe 1 second dwell	25 oz	710gr
Drop Shear	PSTC	> 100 hrs	> 100 hrs

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. Test data and test results contained in this document are for general information only and shall not be relied upon by Nortec 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 Nortec for further information.

**Chemical
Resistance:**

MIL-STD-202F, Notice12, Method 215J.
MIL-STD-883E, Notice4, Method 2015.13.

Samples printed with a recommended thermal transfer ribbon using a zebra 90Xi printer. Labels printed with alphanumerics and 3:1 ratio barcodes with 6 mil Xdimension bars. Samples subjected to 3 cycles of three minute immersions immediately followed by a toothbrush rub after each immersion.

Test Fluid	Results
1 part IPA, 3 Parts Mineral Spirits	No Visual Effect
1,1,1 - Trichloroethene	Solvent deleted per Notice 12
Terpene Defluxer	No Visual Effect
Saponifier	No Visual Effect

Aquanox SSA-(is a trademark of Kyzen Corporation. Zebra(c) printer is a trademark of Zebra Technologies, Inc. EC-7R(is a trademark of Petroferm Inc. Polyken(is a trademark of the Kendall Corporation. RE-ENTRY(is a registered trademark of Environsolv Inc.

Technical Data Sheet 2 Mil Green Polyimide - 767

**Heat/Chemical/Ab
rasion
Resistance¹:**

Samples printed with a recommended thermal ribbon using a Zebra 90Xi printer. Labels printed with 3:1 ratio barcodes with 6 mil X dimension bars.

Samples exposed to indicated environments:

Test Environment	PCS ¹	Read Rate ²
Control	99%	100%
316°C heat, 50 minutes*	99%	100%
Kyzen Corp. Aquanox SSA 30% aqueous, 40-45°C, 10 minutes ³	100%	99%
RE-ENTRY. KNI 2000 Terpene 40-45°C, 10 minutes ³	98%	100%
Alpha Metals Inc. EC-7R Terpene, 40-45°C, 10 minutes ³	98%	100%
Alpha Metals Inc. 2110 Saponifier 6% aqueous, 65-70°C, 10 minutes	97%	100%
Isopropanol 99%, 82°C, 10 minutes	99%	100%
Deionized Water, 100°C 10 minutes	99%	100%

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

² Read rate determined using PCS 850 laser scanner.

³ Followed by 2 minute immersion in deionized water at 100°C.

**Storage stability &
Shelf life:**

1 year below 80°F (27°C) and 60% R.H.

Reference:

AISI: American Iron and Steel Institute (U.S.A.) ASTM: American Society for Testing and Materials (U.S.A.) PSTC: Pressure Sensitive Tape Council (U.S.A.) SI: International Systems of Units.

Warranty:

NORTEC AMI Ltd. recommends that a selected label type be thoroughly tested to insure it meets all end user requirements. NORTEC AMI Ltd. warrants only the purchaser that its products are free from defects in material and workmanship. NORTEC AMI limits its obligation under this warranty and at its option to repair or replace the product. This warranty is in lieu of any other warranty, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. NORTEC AMI is not liable for any damages, including lost profits, lost savings, or other incidental or consequential damages arising out of the use of or inability to use such product.

Rev. 12.09