

## **Product Data Sheet**

Updated: January 2020. This datasheet replaces all previous versions

# **P-221 AMB**

1-MIL KAPTON® POLYIMIDE FILM

#### PRODUCT DESCRIPTION

The ultimate in electrical insulation tapes - both thin and highly conformable. A high-performance tabbing tape also used within lithium ion battery cells, wave and solder reflow, masking against chemicals, heat and harsh conditions making it ideal for use in various markets from consumer electronics to Aerospace.

#### FEATURES

- Outstanding puncture, tear and abrasion resistance.
- Uniform unwinding in long length rolls helps promote use in automated applications.
- A high performance thin and conformable Kapton® backing ensures consistent quality.
- Made with an aggressive adhesive to help adhere against solvents and high temperatures.

#### PRODUCT CONSTRUCTION

**KAPTON® POLYIMIDE FILM** SILICONE, CURED

#### **APPLICATIONS**

- Suited for continuous cold and high temperature environments.
- Used as ground, barrier and phase insulation in small, high performance toroidal coils, high frequency motors, end turn bundling and connection insulation in small motors.
- Recommended for cross over insulation and outer protective wraps on small bobbin and large rotating machine wound coils to bundle conductors and reinforce insulation.
- Applied on printed circuit boards during wave solder masking.

#### PROPERTIES, CERTIFICATIONS AND SPECIFICATIONS

Backing Material	1-Mil Kapton® Polyimide Film	
Adhesive	Silicone, Cured	
Color	Amber	
	Imperial	Metric
Total Tape Thickness	2.6 mil	0.066 mm
Tensile Strength	36 lbs/in	126 N/20 mm
Elongation	85%	
Adhesion to Steel	1.5 lb/in	5.25 N/20 mm
Dielectric Strength	7,500 volts	7.5 kV
Insulation Class CSA	356°F	180°C
Insulation Class UL	356°F	180°C
Certifications	UL-510 & CSA C-22-2, ISO /IATF/AS: https://www.nitto.com/us/en/about_us/Americas/americas_certification/	
Government Specifications	ASTM D5213 TYPE 1, CLASS A (Replaces obsolete MIL-P-46112B)	
Boeing Specifications	BAC 5241	

<sup>\*</sup>CAUTION: The above are typical values and should not be used in writing specifications. Customer is responsible to ensure product meets intended application requirements before approved for use.

UL component Recognition Guide OANZ2, File E20392, CSA C-22.2.RoHS Compliant.







For additional information or support, please visit our website at www.nitto.com or call toll free 800-755-8273

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#### SHELF LIFE & GENERAL STORAGE CONDITIONS

The general shelf life and storage conditions for this Nitto, Inc. product are as follows:

- Shelf life for this product is EIGHTEEN MONTHS FROM DATE OF SHIPMENT.
- Best stored between 50°F-80°F / 10°C-27°C, 25-50% relative humidity; out of direct sunlight.

#### PRECAUTION REMINDER

Surface should be clean, free of oil, moisture and dirt before applying. Pressure-sensitive adhesive tapes may require pressure by roller, hand or press when applying. Not doing so may affect the general properties and appearance. Please inspect your surface prior to application; this tape may not adhere well to extremely uneven or distorted surfaces. Please remember to allow adequate time for full adhesive strength.

#### **WARRANTY INFORMATION**

Unless Nitto agrees otherwise in a written agreement signed by Nitto, the warranty information and other terms of sale can be found in the Nitto Terms and Conditions of Sale in the legal section of www.nitto.com and are hereby incorporated by reference.

#### TECHNICAL SUPPORT

For questions pertaining to this data sheet or for additional product information; please email us directly at support.us@nitto.com

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