



# Technical Data Sheet LINQTAPE™ PIT5S Series

High Temperature Masking & Electrical Insulation Tape – May 2009

## PRODUCT DESCRIPTION

LINQTAPE™ PIT5S Series is a high performance, high-temperature resistant, pressure sensitive polyimide tape designed for both permanent and temporary bonding in many high temperature applications. These applications include but are not limited to semiconductor, smartcard, electronic, automotive and general manufacturing industries.

LINQTAPE™ PIT5S Series Tape provides an excellent balance of electrical, mechanical, thermal, and chemical properties over a wide range of temperatures. It can be used in applications that may see temperatures up to 260°C (500°F).

LINQTAPE™ PIT5S Series Tape comes in 33 meter (36 yard) length rolls of varying widths. The base polyimide film (backing) thickness is 5-mil ( $125 \pm 2\mu\text{m}$ ) thick and the total thickness including the adhesive layer is approximately 6.5 mil ( $165 \pm 4\mu\text{m}$ ).

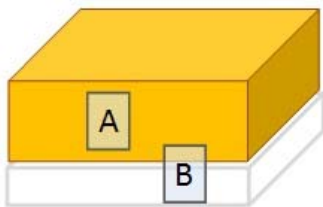


Other LINQTAPE™ PIT-Series tapes of various thicknesses are available upon request.

## APPLICATIONS:

- High adhesion to wide range of substrates
- Temporary bonding of thermocouples for oven profiling
- Bonding of devices prior to solder reflow
- Insulating circuit boards and coils
- Masking in high temperature powder applications
- High Temperature Splicing Tape
- Gold Finger Masking
- High Temperature Harness Wrapping

## PRODUCT CROSS-SECTION:



- A. 125µm: Polyimide Film Layer
- B. 40µm: Silicone Adhesive Layer

## NOMENCLATURE:

- PIT: Polyimide Tape / Film
- 5: 5mil Backing Thickness
- S: Silicone Adhesive

## TYPICAL PROPERTIES

	UNIT	VALUE
Color	-	Amber
Adhesive Type	-	Silicone
Film (Backing) Thickness	µm (mil)	$125 \pm 2\mu\text{m}$ (~5mil)
Adhesive Layer Thickness	µm (mil)	$40 \pm 2\mu\text{m}$ (~1.5 mil)
Total Thickness	µm (mil)	$165 \pm 4\mu\text{m}$ (~6.5 mil)
Adhesion to Steel:	N/25mm	8.2
	oz/in	30
Tensile Strength:	N/25mm	430
	lbs/in	98
Elongation	%	>65
Dielectric Strength	Volts	>20,000
Dielectric Constant	-	$3.5 \pm 0.7$
Temperature Resistance:	°C	260 for 3 min.
	°F	500 for 3 min.
UL-94 Flammability Rating*		V-0

\*NOTE: Since UL classification must be tested for every unique film backing, thickness and adhesive combination, the listed UL rating is only an expected outcome if this material were to be tested. Please contact CAPLINQ to discuss options for obtaining UL certification.

**NOT FOR PRODUCT SPECIFICATIONS.** THE INFORMATION AND RECOMMENDATIONS SUPPLIED IN THIS DOCUMENT ARE BELIEVED TO BE ACCURATE BUT NO GUARANTEE OF THEIR ACCURACY IS MADE; THEY ARE FOR GUIDANCE ONLY AND SHOULD NOT BE CONSTRUED AS A WARRANTY. ALL IMPLIED WARRANTIES ARE EXPRESSLY DISCLAIMED, INCLUDING WITHOUT LIMITATIONS ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR USE. IT IS RECOMMENDED THAT PURCHASERS BEFORE USING THIS PRODUCT CONDUCT THEIR OWN TESTS TO DETERMINE WHETHER THE PRODUCT IS SUITABLE FOR THEIR PARTICULAR PURPOSES UNDER THEIR OWN OPERATING CONDITIONS.

**STORAGE AND HANDLING**

LINQTAPE™ PIT5S Series Tape is supplied in rolls and should be kept in a cool (10°C – 25°C) dry place (40% – 75% humidity) away from direct sunlight or temperature extremes. Once removed from packaging it should be protected against dust and other impurities.

When applying LINQTAPE™ PIT5S Series Tape to any surface, be sure that the surface is free of oil, powder, dust or release agent that might interfere with its adhesion to the substrates.

**DATA RANGES**

The data contained herein may be reported as a typical value and/or range values based on actual test data and are verified on a periodic basis.

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