T2KP - High Temperature Polyamide PCB Labels

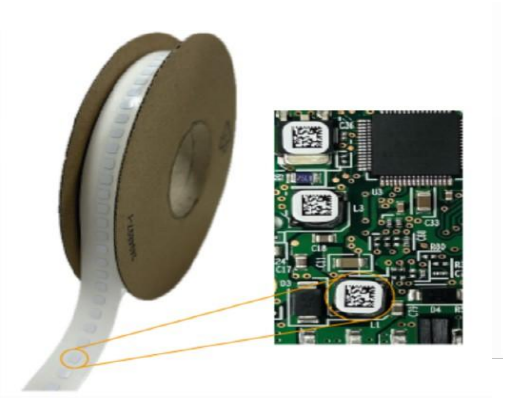
2 mil Polyimide Labels for PCB & Electronic Component Identification

INTRODUCTION

T2KP labels are designed for Printed Circuit Board (PCB) and component identification. The material is a white matt polyimide, 2 mil thick (50.8µm), with a permanent acrylic adhesive and, a white paper glassine liner highly suitable for automatic dispensing application. This product is thermal transfer-printable.

T2KP labels are suitable for high-temperature labelling requirements and are also compatible with wave and reflow applications. These labels are reliable for withstanding fluxes, cleaning solvents and molten solder used in the manufacture of PCB.

T2KP labels are designed to be thermal transfer printed with TE printers and ribbons that helps allow multiple prints, thanks to WinTotal software, available from TE Connectivity (TE).



FEATURES

- High temperature label
- Thermal transfer printable
- Suitable for auto dispensing application
- Withstands surface mount board processes on either the top or bottom side of the board
- Halogen free
- Electrostatic dissipative (ESD)
- High Temperature Resistance
- Self-extinguishing
- UL969 recognized PGJI2/8 - file MH17292 - "T2KP"

APPLICATIONS

- PCB
- Electronic component identification
- High temperature environment

Note: Does not contain any RoHS (EU 2015/863) substance, any California Prop 65 substances. No restricted substances as listed in the Toxic Substances Control Act. Further information and a downloadable declaration covering RoHS and REACH compliance can be found at the TE Product Compliance Support Centre: http://www.te.com/usa-en/utilities/product-compliance.html

THERMAL CHARACTERISTICS

Specifications	Ratings
Operation Temperature Range	1000hrs at 120 °C (248°F) 2hrs at 190°C (374°F) 80s at 290°C (554°F)
Minimum Application Temperature	10°C (50°F)
Minimum Service Temperature	-40°C (-40°F)

TYPICAL LABEL THICKNESS

Type	Values
Label (including adhesive)	0.096 mm / 0.0038 inch
Liner	0.070 mm / 0.0028 inch

TECHNICAL PERFORMANCE

Characteristics	Requirements	Test Methods	Results
Adhesion Test surface: • Stainless steel • Epoxy board	FTM1 (180°)	20min. dwell N/100mm 15.27 52.43	72hrs. dwell N/100mm 33.13 62.35
Print Permanence	Labels to remain legible(1) Barcode / Datamatrix grade C minimum(2)	Federal Standard 191A Method 5306 100 cycles at 250gr	PASS
Fluid Exposure	Labels to remain legible(1) without rub Barcode / Datamatrix grade C minimum(2)	MIL-STD-202G 215K Without rub	
		Kyzen Corp. 15% Aquanox® A4625 at 60°C	PASS
		Kyzen Corp. 17% Aquanox® A4520 at 60°C	PASS
		Kyzen Corp. 10% Aquanox® A4638 at 65°C	PASS
		Kyzen Corp. 10% Aquanox® A703 at 65°C	PASS
		Zestron, 15% Atron® AC205 at 65°C	PASS
		Zestron, 15% Atron® AC207 at 65°C	PASS
		Zestron, 15% Vigon® A201 at 65°C	PASS
		Zestron, 15% Vigon® N600 at 65°C	PASS
		IPA at 23°C	PASS
		Demineralized water at 23°C	PASS
Dielectric strength DC	12 kV minimum	ASTM D1000	PASS, 20.8kV
Thermal performance on epoxy	Labels to remain legible(1) and in place on the epoxy board Barcode / Datamatrix grade C minimum(2)	290°C (80s)	PASS
		270°C (5min)	PASS
		190°C (2hrs)	PASS
		120°C (1000hrs)	PASS

(1) According to TE doc 411-121002 (2) According to ISO 15415 measurement

Characteristics	Requirements	Test Methods	
ESD	10^4-10^{11} Ohms	ANSI / ESD S541-2019	PASS
Chemical vapour resistance	Labels text to remain legible(1) min. C5 Barcode / Datamatrix grade C minimum(2)	Cleaning Micronox® MX2501	PASS
Flammability	Label must be self-extinguishing in less than 3 secondes	ASTM D 1000	PASS
UVA / UVB exposure	No damage to adhesion Labels text to remain legible(1) min. C5 Barcode / Datamatrix grade C minimum(2)	ASTM G154	PASS

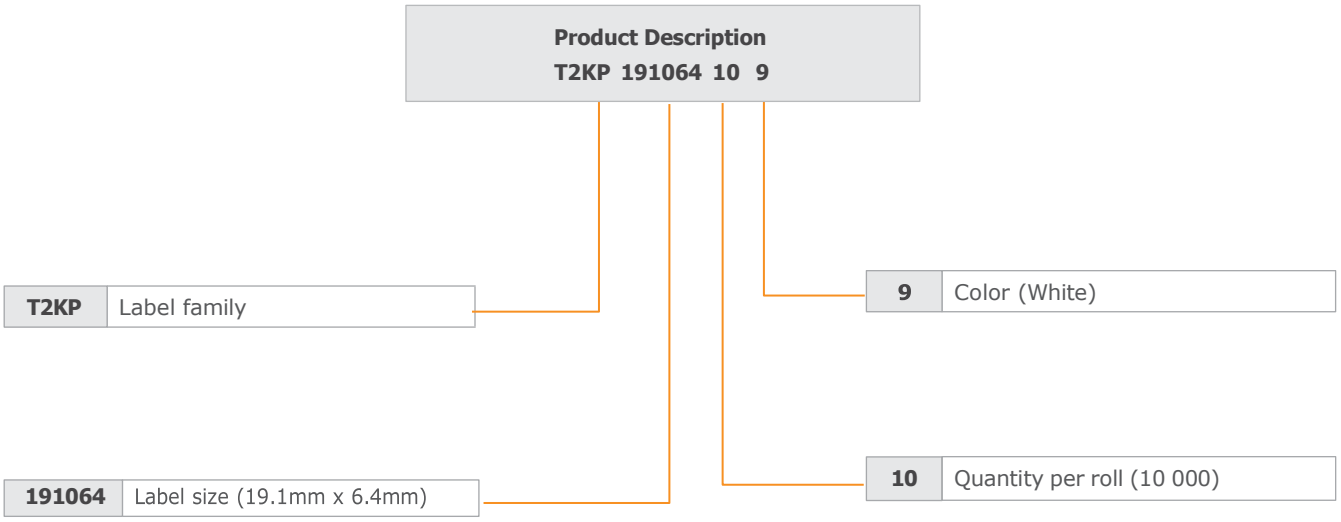
(1) According to TE doc 411-121002 (2) According to ISO 15415 measurement

SHELF LIFE AND STORAGE CONDITIONS

Two years when following good commercial storage practice detailed below.

- Product should be stored in the original packaging, with any plastic covers which were included during shipping.
- Store out of direct sunlight in a clean, dry, dust free, environment.

PRODUCT CODE STRUCTURE

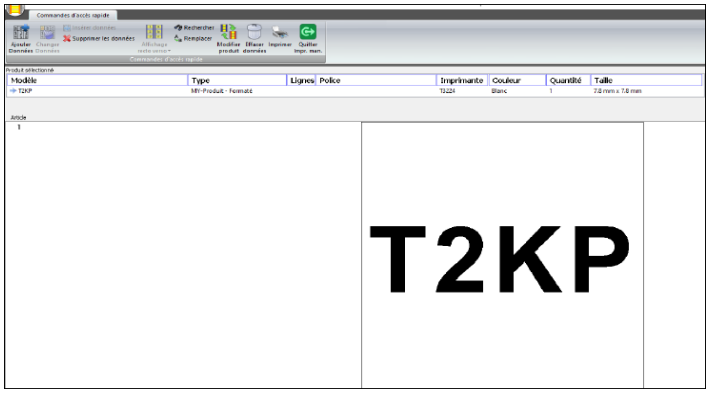


Product description	Part number	Label width* mm (inch)	Label height* mm (inch)	Labels across	Labels per roll	Liner width mm (inch)
T2KP-051051-10-9-1AC	2483351-1	5.08 (0.200)	5.08 (0.200)	1	10 000	19.05 (0.750)
T2KP-064064-10-9-1AC	2483352-1	6.35 (0.250)	6.35 (0.250)	1	10 000	19.05 (0.750)
T2KP-080080-10-9-1AC	2483353-1	8.00 (0.315)	8.00 (0.315)	1	10 000	19.05 (0.750)
T2KP-095095-10-9-1AC	2483355-1	9.53 (0.375)	9.53 (0.375)	1	10 000	19.05 (0.750)
T2KP-165051-10-9-1AC	2483356-1	16.50 (0.650)	5.08 (0.200)	1	10 000	19.05 (0.750)
T2KP-191064-10-9-1AC	2483358-1	19.10 (0.752)	6.35 (0.250)	1	10 000	25.40 (1.000)
T2KP-381064-10-9-1AC	2483428-1	38.10 (1.500)	6.35 (0.250)	1	10 000	43.18 (1.700)
T2KP-508064-10-9-1AC	2483429-1	50.80 (2.000)	6.35 (0.250)	1	10 000	55.88 (2.200)
T2KP-508127-5-9-1AC	2483430-1	50.80 (2.000)	12.70 (0.500)	1	5 000	55.88 (2.200)

* Customized dimensions available as per request.

PRINTER INFORMATION

Print quality and print performance can only be guaranteed when specific TE printer and ribbons are used.
The current list of printers and ribbons can be found in TE document 411-121005 'Identification Printer Product Ribbon Matrix'. This document can be found in 'Access our Tools':
https://www.te.com/en/document-nbr-search.html



SOFTWARE

WinTotal software, available to download for a 14-day evalutation period from the Identification

Printer Software page:

https://www.te.com/usa-en/products/identification-labeling/printers-software-and-accessories/printing-software/wintotal.html?tab=pgp-story

Contact a TE representative for further information.

te.com