

## **TECHNICAL DATA SHEET**

www.tycoidento.com

Document number: TTDS-035

Issue: 4

Date: February 2007

T2K Labels

MATERIAL DESCRIPTION: Tyco Electronics "T2K" is a thermal transfer printable, 2mil thick white polyimide

label with a permanent adhesive.

**USE:** Suitable for high temperature labeling requirements such as printed circuit

boards. Suitable for direct wave (bottom side) and IR reflow (top side) PCB applications. Designed to withstand fluxes, cleaning solvents and molten solder encountered in the manufacture of printed circuit boards. Excellent contrast for bar code applications. With a flash exposure service temperature of 538°C (1000°F), "T2K" is suitable for the harshest high temperature applications. For optimum print performance and durability, use with Tyco Electronics RHT-45

series ribbon.

**PRINT METHOD/RIBBON:** Preferred Printer/Ribbon combination:

Thermal transfer: T312M-PRINTER, Tyco Electronics 1330-0619-10 Ribbon

Alternative Printer/Ribbon combinations:

Thermal transfer: T308S-PRINTER, Tyco Electronics 1330-0619-10 Ribbon Thermal transfer: T312S-PRINTER, Tyco Electronics 1330-0619-10 Ribbon Thermal transfer: T400 Series, Tyco Electronics 1330-0619-10 Ribbon

SHELF LIFE: 1 year when stored at 21°C (70°F) at 50% R.H.

ADHESIVE: Permanent high-temperature pressure sensitive acrylic adhesive with low

outgassing properties.

**COLOR:** Gloss white coating on amber material.

APPROXIMATE TOTAL

THICKNESS:

 Substrate
 0.061mm (0.0024 inches).

 Adhesive:
 0.050mm (0.0020 inches).

 Total
 0.111mm (0.0044 inches).

**SERVICE TEMPERATURE:** 5 minutes: -40°C to 538°C (-40°F to 1000°F).

Long term: -40°C to 260°C (-40°F to 500°F).

MIMIMUM APPLICATION

**TEMPERATURE:** 

10°C (50°F)

**ADHESION:** PCB (G-10 ): 28.3 oz/inch (0.31 N/mm)- 1 min dwell

Stainless steel: 43.5 oz/inch (0.476 N/mm)- 20 min dwell

57.2 oz/inch (0.626 N/mm)- 72 hr dwell

ASTM-D-3330 (180° peel direction) at 21° C (70°F)

TACK: 25oz (710g): ASTM D2979 at 21° C (70°F, 1 second dwell).

FLAMMABILITY: 34% minimum (BS ISO 4589-2 [1999]).

ABRASION RESISTANCE: Resistant to repeated abrasion:

> Printing remains legible for 50 revolutions of CS-10 wheel, 500g load (Taber-Abraser Model 5130). Print not affected with repeated Rub testing as per AS-

81531

**CHEMICAL SOAK RESISTANCE:** 

Results after soaking for 5 minutes.

Fluid Result

No effect on print contrast Alpha Flux: 2110(23°C), 870-25(70°C), 615(23°C) Print remains clearly legible Alpha S30 cleaner(23°C)

PRINT PERMANENCE:

Good resistance to fluids and repeated cleaning:

Meets the requirements of MIL-STD-202 method 215J.

SOLVENT	TEST	EFFECT
Detergent mix	Repeated cleaning (200 cycles Crockmeter)	No visual effect
IPA	Repeated cleaning (100 cycles Crockmeter)	No visual effect
IPA (70%)	7 day immersion	No visual effect
Water	7 day immersion	No visual effect
Water at 95°C (203°F)	Typical PCB wash cycle	No visual effect
Toluene	Repeated cleaning (10 wipes)	Print remains clearly legible
Toluene	30 second soak only	No visual effect

All the above information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Tyco Electronics Corporation makes no warranties as to the accuracy or completeness of the information and disclaims any liability regarding its use. Tyco Electronics' only obligations are those in the Standard Terms and Conditions of Sale for this product and in no case will Tyco Electronics be liable for any incidental, indirect or consequential damages arising from the sale, resale, use or misuse of the product. Tyco Electronics Specifications are subject to change without notice. In addition Tyco Electronics reserves the right to make changes in materials or processing, without notification to the Buyer, which do not affect compliance with any applicable specification.