Digital Thermo Tape™





Show current temperature as a number (in green)



- Encapsulated liquid crystals are printed to polyester film using a special technique.
- Color changing occurs as numbers appear and disappear. Simply take the green number as the current temperature.
- The numbers change color in this order as the temperature rises: black → red-brown → green → blue → navy blue.
- As the temperature decreases, the numbers return to their original color in reverse order.

Ascertain the current temperature from a liquid-crystal indicator





† Current temperature

	2.14.18.18.22.18.23.23.23.23.23.23.24.25.23.23.23.23.23.23.23.23.23.23.23.23.23.
28 30 28 30	
0 2 4 6 8 10 12 1	OBBACCEL / SAME

Example of a customized design

Туре	Temperature range °C	Temperature interval	Color-change accuracy	JAN code
D-M20	− 20~ 0	2°C	±1.0°C	4582130422656
D- M6	− 6∼ 14		±0.5°C	4582130422663
D- 06	6~ 34			4582130422670
D- 16	16~ 36			4582130422687
D- 38	38~ 58			4582130422694
D- 50	50~100	5°C	±2.0°C	4582130422700

30 labels per box

Reference Data

1. Heat resistance

D-M20 to D-50 (continued heating at 60°C): 1,000 hours at 60°C

D-50 (continued heating at 120°C): 10 hours at 120°C (continued heating at 110°C): 30 hours at 110°C (continued heating at 100°C): 60 hours at 100°C

- 2. Water resistance (submersion in water) Up to 3 hours
- 3. Weather resistance

Accelerated weathering test with weather meter
D-M20: 50 hours
D-38: 50 hours
D-16: 20 hours
D-50: 50 hours

- 4. Humidity resistance (below 70% relative humidity)
 - No problems

Water, heat and weather resistance can be enhanced by laminating with non-permeable film.

Response speed Up to 1 sec.



- If Digital Thermo Tape™ is left for long periods in areas exposed to direct sunlight or areas of high humidity, the UV light or moisture may affect the properties, and therefore the color-changing capability, of the liquid crystals.
- Digital Thermo Tape[™] has no resistance to acids and alkalis.
- Avoid contact with organic solvents.
- With D-50, the numbers may start to pale if heated for around 10 hours at 100°C, but color-changing performance will not be affected.
- Also, green numbers may appear simultaneously in low- and high-temperature areas during temperature decrease. In this case, the higher temperature is the current temperature.
- As a guideline, this product should be used indoors and for up to 3 years.