

Featured Products



Compact high-performance head ideal for printing in small spaces

High-Speed Thermal Printheads for Date Code Printers

TH3001-2P1W00A/TH3002-2P1W00A

Achieves a class-leading*¹ print speed of 1,000mm/s*² (305dpi resolution)

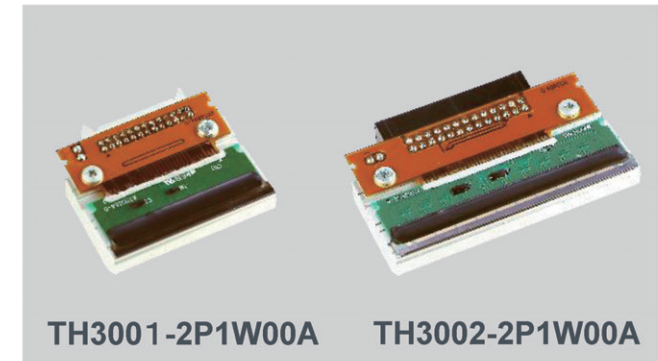
Ensures stable print quality even during continuous high-speed printing, while adopting a new structure minimizes resistive element deterioration

Contributes to shorter maintenance times by increasing the allowable angle

Optimizing the shape of the printhead expands the allowable print angle by approx. 2x over conventional products

Adopts a smaller head size*³ while maintaining the characteristics of the TH3002-2P1W00A

This allows for printing in small spaces without waste, reducing the running costs of ink ribbons



*1 ROHM Aug. 2020 study *2 When using a resin ink ribbon *3 TH3001-2P1W00A

Achieves class-leading print speeds*¹ with a variety of print media

Image of food packaging



Date Code Information
Date/Manufacturing Information
(Shelf Life, Expiration Date)

Accuracy and Speed Comparison: Printing Date Code Information on Packaging Material

When printing a QR code using resin-based ink ribbon

Print Speed (mm/sec)	300	600	1,000
Conventional Product			Not printable
Print Quality	100%	75%	0%
ROHM TH3001-2P1W00A			
Print Quality	100%	100%	75%

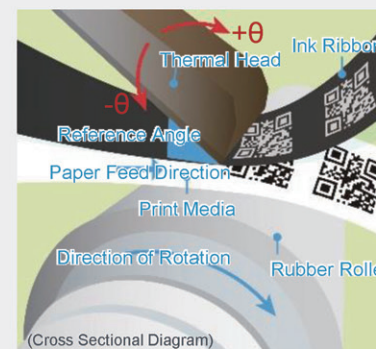
High resolution (305dpi) printing up to 1,000mm/sec can be achieved using resin-based ink ribbons due to their superior abrasion resistance, and as much as 1,500mm/sec with high speed, high reliability wax-based ink ribbons that feature excellent high-speed transferability.

* QR Code is a registered trademark of Denso Wave Inc.

Enables high-density printing of date code information in a compact form factor

Expanding the allowable print angle contributes to shorter maintenance times

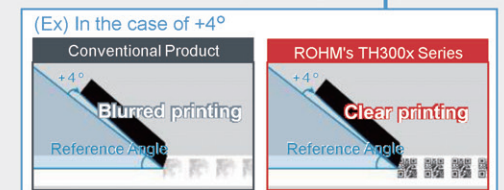
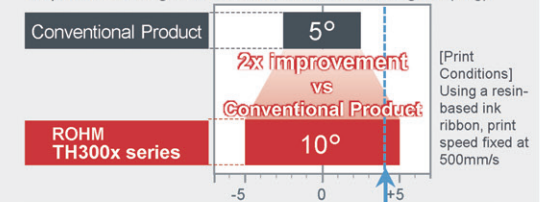
Printing Operation



Stable quality is ensured even in the event of mechanical errors, age-based deterioration, and normal wear

Angle Tolerance Comparison

Displacement Angle Relative to the Reference Angle θ (deg)



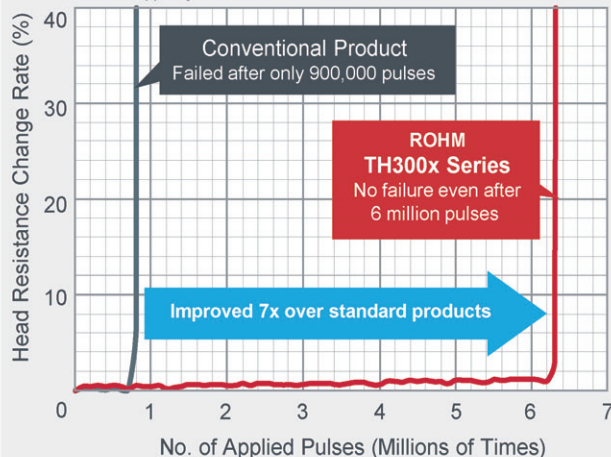
Reduces downtime due to user maintenance

Improved corrosion resistance prolongs printhead life

Corrosion Resistance Comparison

Accelerated Destruction Test by Dripping a Saline Solution on a Thermal Head

[Test Conditions: Saline solution (saturated concentrated solution), VH=24V, VDD=5V applied]



Significantly improved corrosion resistance ensures long-term stability

Drawbacks

Depending on the storage and usage environment of the printer, salt and moisture present in the air can penetrate the protective film of the printhead and cause corrosion and deterioration of the electrode material - including the heat elements.

Features of ROHM's New Thermal Printheads

The densely coated structure with excellent coverage inhibits the penetration of corrosive components. This achieves superior corrosion resistance compared with standard products.

Stable printheads enable use for long periods even in special environments such as food processing sites and logistics warehouses

Applications

- Date code printers
- Barcode printers
- Package printers
- Logistics label printers
- Medical label printers and more...



Specifications

Part No.	REsolution/ Density (dpi)	Print Width (mm)	No. of Dots	Ave. Resistance (Ω)	Max. Compatible Platen φ (mm)	Print Supply Voltage (VH)	Circuit Supply Voltage (V _{DD})	Connector Type	Heat Sink
New TH3001-2P1W00A	305	31.987	384	570	50	24	4.75 to 5.25	Wire cable	YES
TH3002-2P1W00A	305	53.312	640	570	50	24	4.75 to 5.25	Wire cable	YES



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The content specified in this document is correct as of August 1st, 2020.