

# Ricoh Electronics, Inc.

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# RICOH

## THERMAL TRANSFER RIBBON PRODUCT INFORMATION

# D110A

( For Flat Head Printers)

SPECIALTY  
RESIN  
(For Textile Application)

### RIBBON PROPERTY

• Base Material	Polyester film
• Base Thickness (μm)	4.5 ± 0.4

### INK PROPERTY

• Ink Color	Black
• Ink transparency	More than 0.65 ~ 1.65

### IMAGE PROPERTY

• Image Density:	Min. 1.2 (nylon)
	Min. 0.8 (polyester)
	Min. 1.0 (acetate)
• Image Resolution:	Min. ANSI B

### IMAGE DURABILITY

• Ironing resistance:	ΔGD max. 0.07 (direct, covered with cloth)
• Smear resistance (dry,wet):	ΔGD max. 0.07 (direct, covered with cloth)
• Washing resistance (water):	ID min. 1.0 , min. ANSI B (nylon)
	ID min. 0.6 (polyester)
	ID min. 0.7 (acetate)
• Washing resistance (dry):	ID min. 1.0 , min. ANSI B (nylon)
	ID min. 0.6 (polyester)
	ID min. 0.7 (acetate)
• Bleach resistance:	ID min. 1.0 , min. ANSI B (nylon)
	ID min. 0.6 (polyester)
	ID min. 0.8 (acetate)
• Sweat resistance:	ID min. 1.0 , min. ANSI B (nylon)
	ID min. 0.6 (polyester)
	ID min. 0.8 (acetate)

\* ΔID(GD): The difference of image (ground) density between "before test" and "after test"

### OTHERS

• Preservability:	Image property remains and free from blocking even after 72 hours at 40°C preservation.
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\* All tests in this specification are done by Ricoh standard test methods.

### USAGE ENVIRONMENT: STORAGE CONDITIONS:

5 ~ 35°C (41 ~ 95°F) , 30 ~ 85%RH  
Keep indoor, avoiding high temperature (such as beside heat source), high humidity, and direct sunlight. As for master rolls, keep them horizontally hanging.

### GUARANTEE PERIOD:

* Finished rolls:	4 years after manufacturing
* Master rolls :	1 year after coating

### FEATURES:

1. Printable on receiving cloths (nylon, polyester, acetate) and films .
2. Super smear resistance even at temperatures as high as 150°C (302°F); image won't blur even with ironing .
3. Printing image durable against water and dry cleaning.
4. RICOH's unique coating on the back side allows reliable and superior matching qualities with thermal head.

*The above data represent product averages, allowing for industry accepted variances.  
These products should be tested in the end-use conditions to insure that they meet the requirements of the specific application.*