



5100 Resin Ribbon

Premium resin ribbon providing excellent edge definition, combined with exceptional abrasion and solvent resistance

The Zebra 5100 Resin Ribbon is a premium solution designed for applications requiring exceptional durability and print clarity. It offers outstanding abrasion and solvent resistance across a wide variety of substrates, ensuring long-lasting label performance in challenging environments. This ribbon is particularly skilled at producing extremely dense barcodes and high-resolution graphics, thanks to its excellent edge definition.

Its unique resin base provides robust resistance to outdoor elements and chemical solvents, making it an ideal choice for industries that demand resilient labeling solutions. With the Zebra 5100, users can expect reliable and precise printing for critical applications.



Excellent chemical and temperature resistance

Our high-performance resin ribbon formulation produces images that are resistant to most harsh environments when printed on Zebra's synthetic label and tag materials — including smearing, moisture, abrasion, extreme temperatures and chemicals.

Resin Ribbons

Unmatched Print Quality and Durability. Ideal for use:

- With all synthetic materials and some top-coated labels and tags
- In environments with harsh to extreme exposure to chemicals
- When applications require strong resistance against ultra-high temperatures and harsh outdoor environments

Comprehensive choice

Every year, Zebra supplies many million square meters of ribbon to Europe, Middle East and Africa, and the Americas. Comprehensive product choice means you'll always be able to find the right printer ribbon for your specific requirements. We hold around 140 different ribbon items for Zebra printers in stock — all available for immediate delivery via ZipShip, our dedicated stocked supplies solution.

The perfect companion for your Zebra labels, tags and printer

Not all thermal ribbons are created equal. There are hundreds of different ribbon formulations in the market. That is why Zebra's Supplies R&D Team has tested and selected only those ribbons that deliver the best print quality and durability. To get the Zebra name, each ribbon must pass a series of print quality and durability tests.

When you purchase Zebra thermal ribbons you can rest assured that the:

- Print will be readable and scannable every time.
- Print will withstand the environment in which it will be used in.
- Backcoating will not cause premature printhead failure.

5100 Resin Ribbon—UL certified ribbon, with excellent edge definition combined with exceptional abrasion and solvent resistance.

For more information, please visit www.zebra.com/ribbons

Specifications

Technical Specifications	
Color	Black
Ink Formulation	Resin
Base Film	Polyester
Base Film Caliper	4.5 microns
Total Caliper	6.6 microns +/- 10%
Scanning Capabilities	IR and Visible Light
Product Performance and Suitability	
Recommended storage conditions (before use)	72° F (22° C) at 50% RH
Expected Shelf Life	1 Year
Sample Part Number	05100BK08305
UL/cUL Certified Materials with this Ribbon	
Z-Supreme 2000T - UL Recognized Z-Supreme 3000T - UL Recognized Z-Supreme 4000T - UL Recognized Z-Ultimate® 4000T White & Silver - UL Recognized Z-Ultimate® 4000T Removable - UL Recognized Z-Ultimate® 4000T High-Tack - UL Recognized Z-Ultimate® 3000T White & Silver - UL Recognized Z-Ultimate® 2000T White - UL Recognized Z-Xtreme 4000T White & Silver - UL Recognized Z-Xtreme 4000T High-Tack White & Silver - UL Recognized	
Ribbon Compliance	
REACH RoHS WEEE IEC 61249-2-21 Halogen Free	
Stocked Sizes Available for Zebra Printers	
P4T, desktop, mid-range and high-performance thermal printers, Zebra engines, other legacy Zebra printers. Other widths/lengths are available on request subject to minimum order quantities and lead times	
Material Testing in End Application	
The information contained in this document is to be used for guidance only and is not intended for use in setting specifications. All purchasers of Zebra products shall be solely responsible for independently determining if the product conforms to all requirements of their unique application. All products should be pre-tested to ensure they meet all intended requirements of specific end-use applications.	

Markets and Applications

- High temperature, harsh environments requiring excellent print quality, print durability and label performance
- Printed circuit board applications
- Replacement for laminated labels
- Labeling applications requiring extreme resistance to chemicals