

# Z-Ultimate 2000T Label

Thermal transfer, gloss polyester label with a permanent acrylic adhesive

Optimal for the labeling of assets in more challenging environments, including those that require chemical processing, Zebra's Ultimate 2000T label delivers. This thermal transfer, white, gloss polyester label is engineered to provide reliable print quality and durability. When paired with Zebra's 6200 wax/resin or 5100 and 5095 resin ribbons, you get unparalleled smear and scratch resistant print and durability against moderate chemicals, such as alcohol, IPA and ammonia. Its UL acceptance makes it a great choice for identifying UL-certified products that will be used indoors. It is suitable for fan-folding. And with Zebra's legacy of craftsmanship and durability, you can count on optimized performance – with each and every label. Z-Ultimate 2000T labels are recommended for a wide variety of labeling applications, including UL-certified products, top-side PCB labeling and automotive component identification.



## Print Confident. Print Quality. Print Zebra

Printing supplies can impact everything from printhead lifespan to operational efficiency. That's why we design, produce and rigorously pre-test our own line of thermal printing supplies to ensure consistent, optimized performance. We utilize an ISO 9001 certified, 23-point inspection process and consistent materials to ensure reliable performance from order-to-order. No matter when you order your labels, you can count on the same consistent performance.

## Unparalleled smear and scratch, moderate chemical and high-heat resistant

Z-Ultimate 2000T labels, when paired with Zebra's 6200, 5100 or 5095 ribbons, offer excellent adhesive quality and print durability to smearing and scratching, ensuring your assets remain identifiable throughout their useful life. The label will remain readable and intact when subjected to moderate chemicals, such as alcohol, ammonia, IPA and bleach, making it the perfect choice for identifying assets that will require cleaning and disinfecting with chemicals, such as medical devices and food preparation equipment. Once applied, this label can withstand temperatures up to 302° F/150° C, making it a reliable choice to identify products which require high-heat processing during manufacturing and those that will be subjected to heat when in use, such as some food preparation equipment.

## UL certified labeling solution

Z-Ultimate 2000T labels combined with Zebra's 5100 and 5095 have been fully tested and certified by UL to the UL 969 standard. In addition, Zebra supplied manufacturing plants are authorized to pre-print the UL mark.

## Zebra ZipShip – on the shelf and ready to ship

Need your labels in a hurry? Z-Ultimate 2000T labels are part of our Zebra ZipShip Program – on the shelf and ready for immediate dispatch. You get fast shipment – and the minimum order is just one box.

## Customized for your application.

Zebra can deliver Z-Ultimate 2000T labels in just about any size, shape or label set configuration to meet the requirements of your application and process. In addition, our flexographic print presses can add pre-printed text, graphics and color.

**Z-Ultimate 2000T Label – UL certified, high-heat, smear and scratch resistant labels with moderate chemical resistance and high-performance acrylic adhesive for more challenging applications.**

# Specifications

| Material Construction                        |  |
|--|--|
| Raw Material Number                          | 68130RM  |
| Facestock                                    | Thermal transfer, gloss, white, polyester<br>2.0 mil/50.8 microns  |
| Adhesive                                     | High-performance, permanent acrylic adhesive<br>0.8 mil/20.32 microns  |
| Liner  | 50 lb/74 gsm semi-bleached kraft liner<br>3.0 mil/76.2 microns   |
| Total Thickness (+/-10%)                     | 5.8 mil/147.3 microns  |
| Environment                                  | Indoor use; Outdoor use up to 3 years  |
| Temperature Performance                      |  |
| Minimum Application Temperature <sup>1</sup> | 50° F/10° C  |
| Service Temperature Range <sup>2</sup>       | -40° F to 302° F/-40° C to 150° C  |
| Recommended Printers and Ribbons             |  |
| Printers                                     | Thermal transfer printer (ribbon required); use Zebra desktop, mid-range and high-performance thermal printers for optimal performance |
| Ribbons                                      | Compatible with Zebra 6200, 5095 and 5100 resin ribbons for optimal performance  |
| Adhesive Strength                            |  |
| Stainless Steel                              | 5 minute dwell time: 27 oz/in.   |
|  | 24 hour dwell time: 30 oz/in.  |
| Polycarbonate                                | 5 minute dwell time: 38 oz/in.   |
|  | 24 hour dwell time: 48 oz/in.  |
| Polyethylene                                 | 5 minute dwell time: 15 oz/in.   |
|  | 24 hour dwell time: 16 oz/in.  |
| Facestock Tensile Strength                   |  |
| Machine Direction                            | 18,000 psi   |
| Transverse Direction                         | 22,000 psi   |
| Chemical Resistance                          |  |
| Weak Chemicals                               |  |
| Blood  | 6200, 5095 & 5100: Recommended   |
| Body Fluid                                   | 6200, 5095 & 5100: Recommended   |
| Salt Water                                   | 6200, 5095 & 5100: Recommended   |
| Water  | 6200, 5095 & 5100: Recommended   |
| Window Cleaner                               | 6200, 5095 & 5100: Recommended   |

| Moderate Chemicals  |   |
|---|---|
| Alcohol   | 6200, 5095 & 5100: Recommended  |
| Ammonia   | 6200, 5095 & 5100: Recommended  |
| Bleach  | 6200, 5095 & 5100: Recommended  |
| IPA   | 6200, 5095 & 5100: Recommended  |
| Harsh Chemicals   |   |
| Gasoline  | 6200, 5095 & 5100: Test in your application   |
| Grease  | 6200, 5095 & 5100: Test in your application   |
| Oil   | 6200, 5095 & 5100: Test in your application   |
| Extreme Chemicals   |   |
| Acetone   | Not recommended   |
| IR Reflow   | Not recommended   |
| MEK   | Not recommended   |
| TCE   | Not recommended   |
| Xylene  | Not recommended   |
| Regulatory Compliance   |   |
| UL with 5095 and 5100 ribbons; UL-recognized for indoor use   |   |
| Product Performance and Suitability   |   |
| Recommended storage conditions  | 1 year duration when stored at 72° F/22° C at 50% RH  |
| Expected life span in application <sup>3</sup>  | Indoor and outdoor up to 3 years  |
| 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. |   |
| Warranty  |   |
| Supplies are warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For the complete warranty statement, please visit <a href="http://www.zebra.com/warranty">www.zebra.com/warranty</a> .  |   |
| Footnotes   |   |
| 1.  | When the label is applied, the environment and surface should be above this temperature.  |
| 2.  | Following correct application and appropriate dwell time (usually 24hrs) the media will withstand this temperature range.         |
| 3.  | Following correct application and appropriate dwell time (usually 24hrs) we expect, but do not warrant, a life span as indicated. |

## Markets and Applications

### Manufacturing

- Top-side PCB labeling
- Product identification
- Automotive part labeling
- UL product labeling





EOS-200 U9

# T A G E O S

## Datasheet



T A G E O S

### Specific Solution for Tagging Jewelry and Accessories

The EOS-200 U9 Jewelry inlay combines compact size with a special shape that makes it particularly apt for tagging jewelry and small accessories. The inlay's IC-specific antenna design and reliable performance make it a solution of choice for a wide range of retail applications such as inventory visibility and item-level tagging.

EOS-200 U9 Jewelry inlay uses NXP's UCODE 9 IC which is well suited for inventory management applications and enables fast inventory tracking of dense RFID tag populations. The chip also features 96-bit EPC; kill password; EPC and kill password permalock; self-adjusting impedance; and memory integrity safeguards.

The EOS-200 U9 Jewelry inlay is available in plastic-face delivery format.

Tageos was one of the first companies to have successfully completed the ARC Quality Certification from Auburn University RFID Lab.

Like all Tageos' RFID products, the RAIN RFID inlay is compliant with ISO 9001:2015 Quality Management System. All products comply with Environmental Directives RoHS and REACH, utilizing sustainable materials such as FSC® certified paper whenever possible.

#### Overview

|                  |                                   |
|------------------|-----------------------------------|
| IC:              | NXP UCODE 9                       |
| EPC/User Memory: | 96 bit / - bit                    |
| TID Memory:      | 96 bit incl. 48 bit unique S/N    |
| Frequency Band:  | 860 - 960 MHz (ETSI)              |
| Protocol:        | EPC Class 1 Gen 2<br>ISO 18000-6c |

#### Application Areas

- Accessories & Jewelry





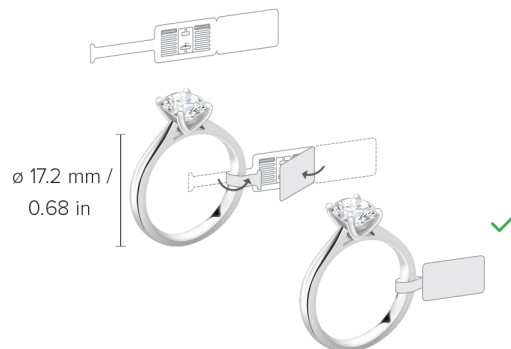
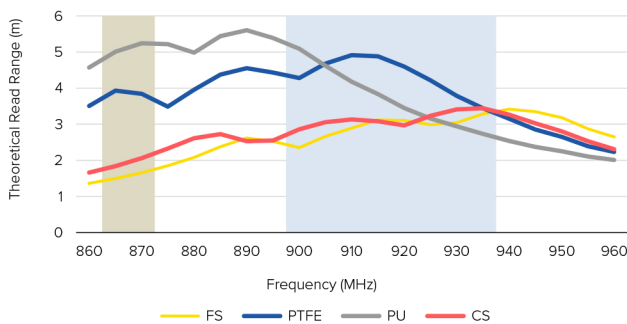
# EOS-200 U9

# T A G E O S

## Technical Overview

|                       | Plastic-face Inlay               |   |
|-----------------------|----------------------------------|---|
| Product Code          | 200000101                        |   |
| Antenna Size          | 20 x 10 mm<br>0.79 x 0.39 in     |   |
| Finish Size           | 76 x 14 mm<br>2.99 x 0.55 in     | 25 x 14 mm (Folded size without tail)<br>0.98 x 0.55 in |
| Web Width             | 80 ± 1 mm<br>3.15 ± 0.04 in      |   |
| Pitch                 | 18.18 ± 0.5 mm<br>0.72 ± 0.02 in |   |
| Antenna Material      | Aluminium                        |   |
| Front Face            | PP White                         |   |
| Inlay Substrate       | Clear PET                        |   |
| Inlay Adhesive        | Permanent                        |   |
| Liner                 | Paper                            |   |
| Operating Temperature | -40°C / +85°C<br>-40°F / +185°F  |   |
| Final Inspection      | 100% tested                      |   |
| Market Approvals      | -                                |   |

Read Range



**Graphs:** All the graphs are indicative; performance in real life applications may vary. The data has been determined based on calculations for transmitters with a normal output power level and respective IC silicon. **Storage & handling precautions:** Observe standard storage and handling practices to minimize Electro Static Discharge. Tageos reserves the right to change its products and services at any time without notice. As our products are used in circumstances beyond our control, we cannot be held liable for any damages caused through their use. This is a general purpose product not designed or intended for any specific application.

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