# AD-327 U9 ETSI Pure 95™

## Overview

**Frequency Band**
UHF 860 - 960 MHz

**Chip**
NXP UCODE 9

**Chip Attachment Technology**
Strap Attach

**Antenna Dimensions**
41.4 x 16 mm / 1.63 x 0.63 in

**Die-cut Dimensions**
44.45 x 19.05 mm / 1.75 x 0.75 in

**International Standard**
ISO/IEC 18000-63 Type C

**Industry Segments**
Apparel
Logistics
Healthcare

**Applications**
Supply Chain Management
Home Essentials
Inventory and Logistics

**RoHS**
EU Directive 2011/65/EU and 2015/863 Compliant

**REACH**
Regulation (EC) No. 1907/2006

**End of Life**
EU Paper recyclability: PTS-RH021:97/2012
US Paper Recyclability: SBS-E Part I (Repulpability) and Part II (Recyclability)

## Excellent read range and versatility

AD-327 U9 ETSI Pure 95™ inlays leverage the capabilities of NXP's UCODE 9 chip, and are suitable for a wide variety of RFID tagging applications, including supply chain, inventory & logistics, apparel, and pharmaceutical & healthcare. The inlay design is optimized for outstanding performance in the ETSI frequency band (865-868 MHz) on a given footprint of 41.4 x 16 mm. Delivery formats wet inlay and pressure sensitive label.

**Sustainability**
AD-327 U9 Pure 95™ is produced via innovative antenna manufacturing technology where the aluminum antenna is made with pure aluminum, replacing the PET aluminum laminate traditionally used in standard antenna production. By eliminating the plastic-based layer, the total inlay construction is up to 95% plastic-free in both wet inlay and label formats. A minimal amount of plastic strap is used for the memory chip attachment. According to an LCA (Life Cycle Analysis) study by an independent institute the innovative manufacturing technology provides typically 70-90% savings in carbon footprint compared to traditional etching methods.

The manufacturing process also enables recycling excess materials and reducing the total amount of materials while maintaining the overall performance of the product.The impact of the Pure 95™ paper-based inlays and tags in cardboard recycling has been verified by a third-party laboratory in the EU against PTS-RH 021:97/2012. In the US, the hangtag construction is certified by West Michigan University against SBS-E Part I (repulpability) and Part II (recyclability). How2Recycle® has "pre-qualified*" the RFID construction when applied to a paper hangtag and determined that the structure is eligible for a widely recyclable label.

**Quality**
Like all RFID products from Avery Dennison, AD-327 U9 ETSI Pure 95™ inlays are manufactured according to the industry's highest quality standards, as confirmed by the RFID Lab at Auburn University: The inspection body awarded Avery Dennison its first comprehensive and significant ARC accreditation for quality.

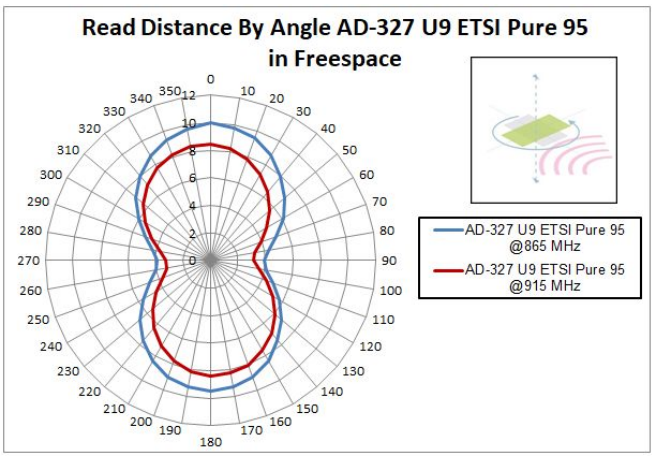


***How2Recycle:** "Additional components, product application, or other attributes may change the final recyclability of the package. Must be a How2Recycle member and submit a label request to use the label on pack".

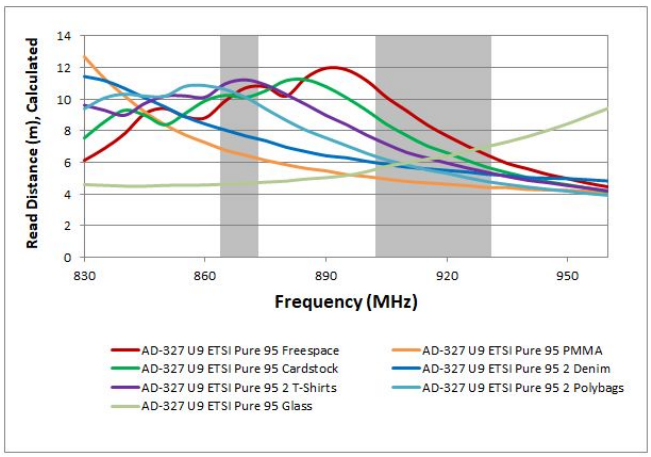
# Technical features

| | | | |
|---|---|---|---|
| **Chip** | NXP UCODE 9 | | |
| **Chip Attachment Technology** | Strap Attach | | |
| **EPC and User Memory** | 96-bit and n/a | | |
| **TID Memory** | 96-bit / 48-bit unique serial number | | |
| **Product Code** | RF602351 / IL-605264 | RF101073 / IL-605485 | RF101072 / IL-606783 |
| **Delivery Format** | Wet inlay | Label | Label |
| **Die-Cut Dimension** | 44.45 x 19.05 mm / 1.75 x 0.75 in | 44.45 x 19.05 mm / 1.75 x 0.75 in | 44.45 x 19.05 mm / 1.75 x 0.75 in |
| **Inlay Substrate** | 40# Paper | 3pt Paper | 5pt Paper |
| **Total Thickness** | 11.6 – 13.6 mils / 294.64 – 345.44 microns | 12.8 – 14.8 mils / 325.12 – 375.92 microns | 14.5 – 16.5 mils / 368.3 – 419.1 microns |
| **Standard Pitch** | 38.1 mm / 1.5 in | 38.1 mm / 1.5 in | 38.1 mm / 1.5 in |
| **Web Width** | 50.8 mm / 2 in | 50.8 mm / 2 in | 50.8 mm / 2 in |
| **Core Size** | 76 mm / 3 in | 76 mm / 3 in | 76 mm / 3 in |
| **Size of Roll** | MAX OD: 13 in | MAX OD: 8 in | MAX OD: 8 in |
| **Quantity / Reel** | 5,767 pcs/reel | 1,941 pcs/reel | 1,740 pcs/reel |
| **Operating Temperature** | -40 °C to 85 °C / -40 °F to 185 °F | | |
| **On-Metal** | Non metal | | |
| **Certificate** | ARC Specification Guide | | |

## Orientation sensitivity




## Read range




All graphs are indicative: performance in real life applications may vary.

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