

## TAG SPECIFICATION

**ECO Bumper Paper Tag**  
**Sales code 500187**  
**NXP UCODE 9**

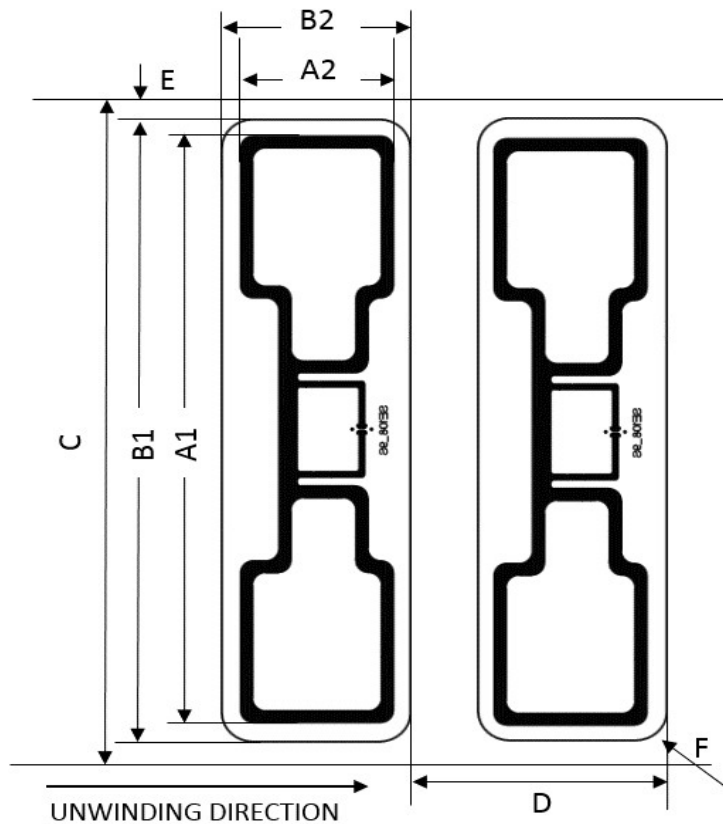


### General specification and characteristics

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Operating frequency                          | 860-960 MHz                        |
| Air interface protocol                       | EPC Gen2v2.1, ISO 18 000-63        |
| EPC memory                                   | 96 bit, 0 bit                      |
| Operating temperature (electronics)          | -40 °C...+85 °C / -40 °F...+185 °F |
| ESD voltage immunity                         | ± 2 kV peak HBM                    |
| Shelf life: 1 year (from manufacturing date) | +20 °C / +68 °F, 50 % RH           |
| Bending diameter                             | > 50 mm, tension less than 10 N    |

### Mechanical specification

| Dimension | Item                        | Metric<br>[mm] | Tolerance<br>[mm] | US<br>[in]    |
|-----------|-----------------------------|----------------|-------------------|---------------|
| A1 x A2   | Antenna size                | 94 x 24        | ± 0,5             | 3,701 x 0,945 |
| B1 x B2   | Die-cut size                | 97 x 27        | ± 0,5             | 3,819 x 1,063 |
| C         | Web width                   | 100            | ± 1,0             | 3.937         |
| D         | Pitch length per piece (MD) | 30.48          | ± 0,5             | 1.200         |
| E         | Die-cut to web edge         | 1.5            | ± 1,0             | 0.059         |
| F         | Radius                      | 2              | ± 0,2             | 0.079         |



## Cross section



## Tag characteristics

|                              |                              |               |
|------------------------------|------------------------------|---------------|
| Tag format                   | Die-cut paper label on reel  |               |
| Tag face material            | White woodfree paper, 102 um |               |
| Tag antenna material         | Conductive paste             |               |
| Tag adhesive                 | Permanent PSA                |               |
| - Min. labelling temperature | +5 °C                        | +41 °F        |
| - Service temperature        | -5...+60 °C                  | +23...+140 °F |
| - Peel min.                  | 3 N / 25 mm (FTM 2)          |               |

## Delivery details

|                         |                                                              |  |
|-------------------------|--------------------------------------------------------------|--|
| Standard delivery yield | > 99%, Bad tags marked                                       |  |
| Minimum delivery yield  | > 97%                                                        |  |
| Appearance              | Single row reel form                                         |  |
| Reel core               | Card board core, inner diameter 76 mm (3 in)                 |  |
| Winding of the reel     | Face out                                                     |  |
| Reel size               | 4 000 pcs/reel. Diameter: < 205 mm                           |  |
| Package size            | 12 000 or 16 000 pcs/box.<br>Delivery only in full packages. |  |

## Compliances



### Disclaimer:

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| Version history | Document history                            | Date       | Author |
|-----------------|---------------------------------------------|------------|--------|
| 1.0             | Created                                     | 16.8.2021  | EMH    |
| 1.1             | Logo, delivery yield and disclaimer updated | 28.9.2021  | MKT    |
| 1.2             | Bad unit marking added                      | 26.11.2021 | KT     |
| 1.3             | Package size updated                        | 8.3.2022   | EMH    |