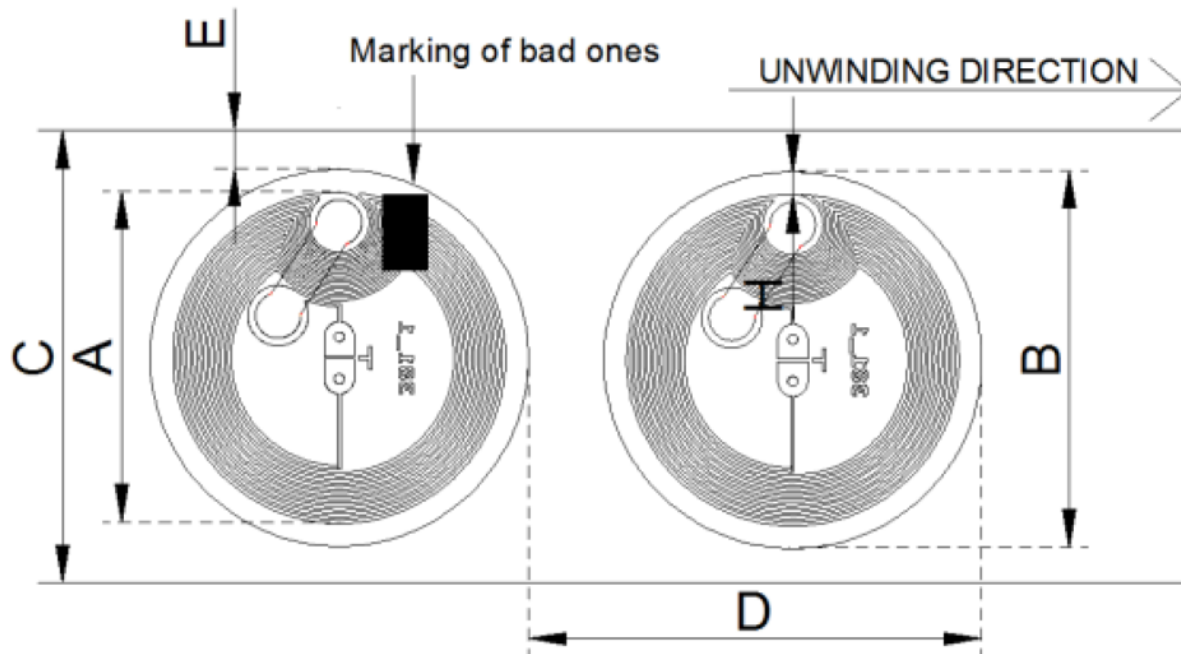


Circus Wet Inlay
 ISO 18 000-3 Mode 3
 NXP ICode ILT-M (23pF)
 Sales code 3002540

Mechanical dimensions

| | | | | |
|---|---|--------|----------|----------|
| A | Antenna size | 22 mm | ± 0,5 mm | 0,866 in |
| B | Die-cut size | 25 mm | ± 0,2 mm | 0,984 in |
| C | Web width | 30 mm | ± 0,5 mm | 1,181 in |
| D | Pitch, length per piece MD | 30 mm | ± 1,5 mm | 1,181 in |
| E | Die-cut to web edge | 2,5 mm | ± 1,5 mm | 0,098 in |
| H | Antenna to die-cut (CD) | 1,5 mm | ± 1,5 mm | 0,059 in |
| | Thickness of the IC | 120 µm | ± 15 % | |
| | Overall thickness of the transponder package (excluding IC and siliconized paper) | 111 µm | ± 10 % | |



Electrical characteristics

| | |
|------------------------------|------------------------|
| Integrated Circuit (IC) | NXP ICode ILT-M (23pF) |
| Air interface protocol | ISO 18 000-3 Mode 3 |
| Operation frequency | 13,56 MHz |
| Unloaded resonance frequency | TBD |
| Memory | 240 bit EPC + 512 bit |

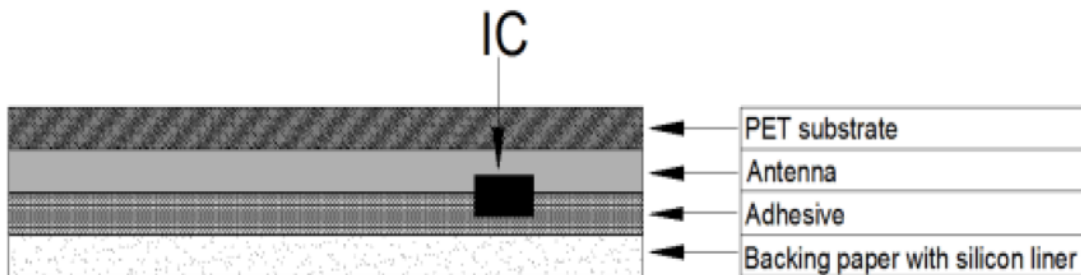
General characteristics of transponder

| | | |
|---|---------------------------------|-----------------|
| Operating temperature (electronics parts) | -40 °C / +85 °C | -40 °F / 185 °F |
| ESD voltage immunity | ± 2 kV peak HBM | |
| Shelf life: From the date of manufacture 2 years in | +20 °C, 50 % RH | 68 °F, 50 % RH |
| Bending diameter (D) | > 50 mm, tension less than 10 N | |

Delivery form

| | | |
|------------------------------|---|----------------|
| Transponder format | Die-cut | |
| Transponder face material | Clear PET 38 | |
| Transponder backing material | Siliconized Paper 56 | |
| Transponder antenna material | Aluminum, crimped coil | |
| Transponder adhesive | RA-2 | |
| - labelling temperature | min. +5 °C | min. +41 °F |
| - usage temperature | -40°C - 150 °C | -40°F - 302 °F |
| - peel | min. 15 N / 25 mm (FTM 1) | |
| Final inspection | 100 %, known faulty ones marked | |
| Minimum delivery yield | 95 % | |
| Reel Label | Reel number, Material number, Material description, Yield, Qty of functional inlays, Qty of non-functional inlays, Date | |
| Printability | Needs to be tested by customer | |

Structure



Delivery details

| | |
|-----------------------|---|
| Appearance | Single row reel form |
| Reel core | Paper core inner diameter 76 mm (3 in) |
| Transponder alignment | Chip in the middle of transponder |
| Winding of the reel | Face out |
| Reel size | 5000 pcs/reel |
| Package size | 15000 pcs/box Deliveries only in full packages. |

Disclaimer:

SMARTRAC reserves the right to change its products and services at any time without notice. Our recommendations are based on our best knowledge and experience. As the products are used outside our control we cannot take responsibility for any damage that may be caused when using the product. Use extra care in handling the product.

This technical specification replaces all earlier ones.

| | |
|-------------|-------------------------------|
| Version | 5 |
| Update date | 16 October 2014 |
| Author | SMARTRAC / k731743 |
| Approved | SMARTRAC / 16.10.2014 k733015 |

