# SMARTRAC connect things

## **Product Specification**

HF 50 x 50 mm Wet Inlay ISO 15 693, ISO 18 000-3 Mode 1 NXP ICode SLIX Sales code 3001959

#### **Mechanical dimensions**

A1 x A2	Antenna size	47 x 47 mm	± 0,5 mm	1.850 x 1.850 in
B1 x B2	Die-cut size	50 x 50 mm	± 0,2 mm	1.969 x 1.969 in
С	Web width	54 mm	± 0,5 mm	2.126 in
D	Pitch, length per piece MD	56 mm	± 1,5 mm	2.205 in
E	Die-cut to web edge	2 mm	± 1,5 mm	0.079 in
F	Die-cut to register mark	1.5 mm	± 1,5 mm	0.059 in
G	Antenna to die-cut (MD)	1.5 mm	± 1,5 mm	0.059 in
Н	Antenna to die-cut (CD)	1.5 mm	± 1,5 mm	0.059 in
U	Die-cut corner radius	3 mm		0,118 in
	Thickness of the IC	120 µm	± 15 %	
	Overall thickness of the transponder package (excluding IC and siliconized paper)	179 µm	± 10 %	
	Thickness of the siliconized paper	56 µm	±5%	



## **Electrical characteristics**

Integrated Circuit (IC)	NXP ICode SLIX
Air interface protocol	ISO 15 693, ISO 18 000-3 Mode 1
Operation frequency	13,56 MHz
Unloaded resonance frequency	14,15 MHz ± 0,35 MHz
Memory	896 bits user memory

## 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	Die-cut		
Transponder face material	Clear PP 50	Clear PP 50		
Transponder backing material	Siliconized Paper 56	Siliconized Paper 56		
Transponder antenna material	Aluminum, crimped o	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	100 %, known faulty ones marked		
Minimum delivery yield	97 %			
Reel Label Reel number, Material number, Material des Yield, Qty of functional inlays, Qty of non-fu inlays, Date				
Printability	Needs to be tested b	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 at rear of transponder
Winding of the reel	Face out
Reel size	2000 pcs/reel Diameter: <205 mm
Package size	4000 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.

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