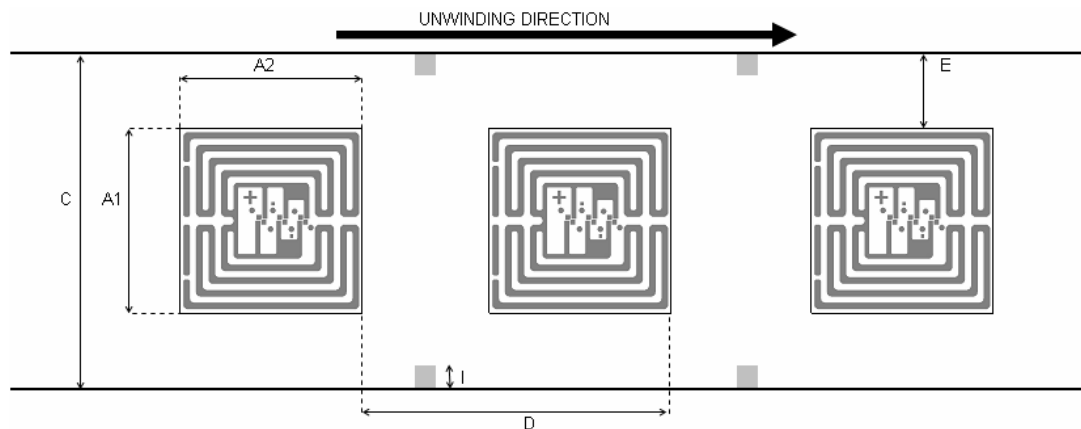


Rafsec UHF Tag
Class 1 Gen 2 96-bit EPC
Sales code 3000731

Preliminary Product Specification

Mechanical dimensions

A1	Antenna width	21	[mm]	±	0,2	[mm]
A2	Antenna length	21	[mm]	±	0,2	[mm]
C	Web width	35	[mm]	±	0,5	[mm]
D	Pitch length per piece	30	[mm]	±	3	[mm]
E	Antenna coil to web edge	7	[mm]	±	2	[mm]



Electrical characteristics

Integrated Circuit (IC)	96 bit EPC Class 1 Gen 2
Free air frequency	915 ± 15 MHz, loaded mode
Read Sensitivity	Min. 7,8 V/m

General characteristics of transponder

Operating temperature (electronics parts)	-40°C/+65°C
Thermal cycle resistance (electronics parts)	200 cycles – 40 °C/ + 80°C
Temperature humidity resistance (electronics parts)	80°C, 85 RH, 168 h
ESD voltage immunity	+/- 1 kV peak, HBM
Storage	+15°C - +25°C, 40-60 % RH, max 2 years
Bending diameter (D)	> 50 mm, tension less than 10 N
Static pressure (P)	< 10 MPa (10 N/mm ²)

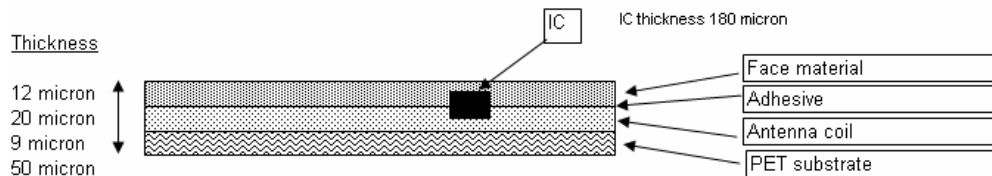
Memory Structure

MEM BANK #	MEM BANK NAME	MEM BANK BIT ADDRESS	BIT NUMBER															
			15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
10 ₂	TID (ROM)	10 _n -1F _n	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	
		00 _n -0F _n	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	
01 ₂	EPC (NVM)	70 _n -7F _n	EPC[15:0]															
		60 _n -6F _n	EPC[31:16]															
		50 _n -5F _n	EPC[47:32]															
		40 _n -4F _n	EPC[63:48]															
		30 _n -3F _n	EPC[79:64]															
		20 _n -2F _n	EPC[95:80]															
		10 _n -1F _n	PROTOCOL-CONTROL BITS (PC)															
		00 _n -0F _n	CRC-16															
00 ₂	RESERVED (NVM)	40 _n -4F _n	LOCK_BITS[9:0]												KILL	FACTORY SETTINGS		
		30 _n -3F _n	ACCESS PASSWORD[15:0]															
		20 _n -2F _n	ACCESS PASSWORD[31:16]															
		10 _n -1F _n	KILL PASSWORD[15:0]															
		00 _n -0F _n	KILL PASSWORD[31:16]															

Delivery form

Transponder format	Continuous
Transponder face material	Clear PET12
Transponder antenna material	Aluminum
Antenna PD number	PD71_14_6
Final inspection	100%, bad ones marked
Delivery yield	min. 95%
Delivery amount	Purchase order amount, +/- 5%
Documentation	Certificate of analysis (COA)
Reel labeling	Reel number, product number, amount, prod.order number and date

Structure



Delivery details

Appearance	Single row roll form
Packaging	Reels in shrink film and packed in cardboard box
Amount of good ones on roll	xxxx pcs +/- 5%
Reel core	Card board core, inner diameter 76mm (3")
Winding of reel	Face out

Disclaimer:

UPM Raflatac 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.

Version

1.2

Update date

2006-03-14

This technical specification replaces all earlier ones.

Author

UPM Raflatac / AKu

Accepted

UPM Raflatac / TKo