



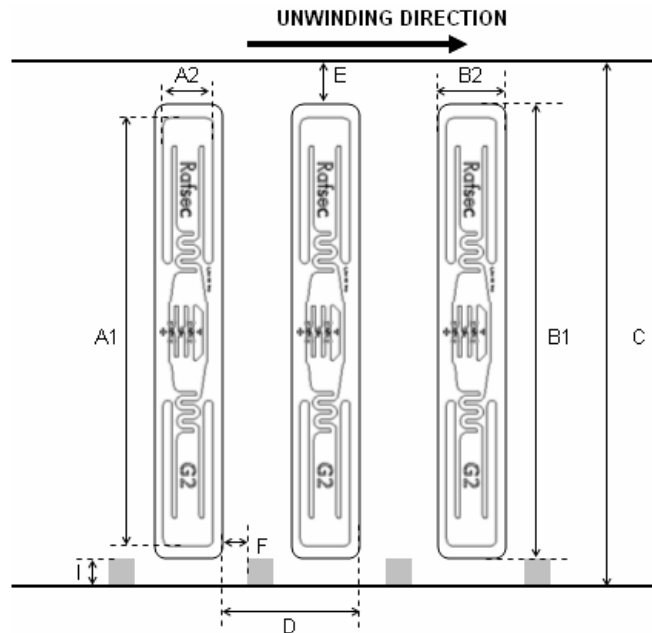
UPM Raflatac
2006-06-21

Preliminary Product Specification

**Rafsec Gen2 Short Dipole
Paper Tag, Global
UHF C1G2 EPC
Sales code 3000846**

Mechanical dimensions

A1	Antenna width	93 ± 0,2	[mm]	3.66	[inch]
A2	Antenna length	11 ± 0,2	[mm]	0.43	[inch]
B1	Die-cut width	97 ± 0,2	[mm]	3.82	[inch]
B2	Die-cut length	15 ± 0,2	[mm]	0.59	[inch]
C	Web width	100 ± 1	[mm]	3.94	[inch]
D	Pitch length per piece	20 ± 3	[mm]	0.79	[inch]
E	Die-cut to web edge	1,5 ± 1	[mm]	0.06	[inch]
F	Die-cut to register mark	1 ± 1	[mm]	0.04	[inch]
I	Minimum size of register mark	5x3	[mm]	0.20x0.12	[inch]



Electrical characteristics

Integrated Circuit (IC)	EPC Class 1 Gen 2 compliant
Total memory	96 bit
Operating frequency	860-960 MHz
Read Sensitivity	Min. 2.3 V/m

General characteristics of transponder

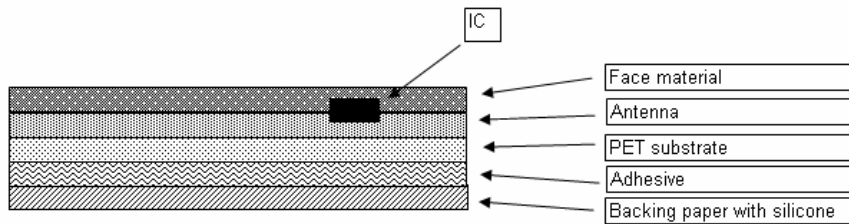
Operating temperature (electronics parts)	-40°C/+65°C	-40°F/+149°F
ESD voltage immunity	+/- 1 kV peak, HBM	
Shelf life: From the date of manufacture 2 years in	+20°C, 50%RH	+68°F, 50%RH
Bending diameter (D)	> 50 mm, tension less than 10 N	
Static pressure (P)	< 10 MPa (10 N/mm ²)	

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Delivery form

Transponder face material	Opaque matt paper	
Transponder antenna material	Aluminum	
Transponder adhesive	RA-2	
- labeling temperature	min. +5°C	min. +41°F
- operation temperature	min. -10°C-120°C	min. 14°F – 248°F
- peel	min. 8 N/25mm (FTM 2)	
Final inspection	100%, bad ones marked	
Delivery yield	min. 95%	

Structure



Delivery details

Appearance	Single row reel form
Documentation	Certificate of analysis (COA)
Reel labeling	Reel number, product number, amount, production order number, yield and date
Reel core	Card board core, inner diameter 76mm (3")
Winding of reel	Face out

Disclaimer:

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This technical specification replaces all earlier ones.