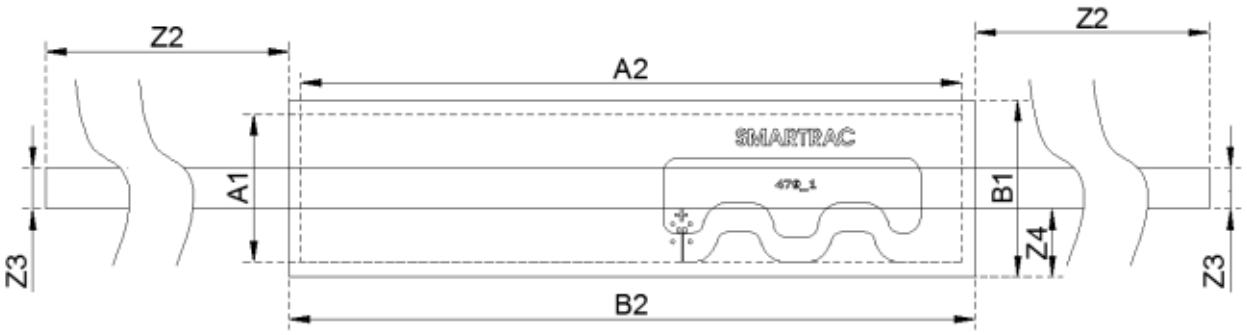
SMARTRAC
connect things

Preliminary Product Specification

Sensor Tadpole FCC White Wet Inlay
EPC Class 1 Gen 2, ISO 18 000-6C
RF Micron Magnus S2
Sales code 3005553

Mechanical dimensions

A1 x A2	Antenna size	18 x 80,87 mm	± 0,5 mm	0,709 x 3,184 in
B1 x B2	Die-cut size	21,5 x 84 mm	± 1,0 mm	0,846 x 3,307 in
Z2	Tail length	160 mm	± 2 mm	6,299 in
Z3	Tail width	5 mm	± 2 mm	0,197 in
Z4	Die-cut to tail edge	8,1 mm	± 2 mm	0,319 in
	Thickness	2,4 mm	± 0,2	0,094 in



Electrical characteristics

Integrated Circuit (IC)	RF Micron Magnus S2
Air interface protocol	EPC Class 1 Gen 2, ISO 18 000-6C
Operation frequency	860 - 960 MHz
Memory	128 bit EPC + 144 bit user memory

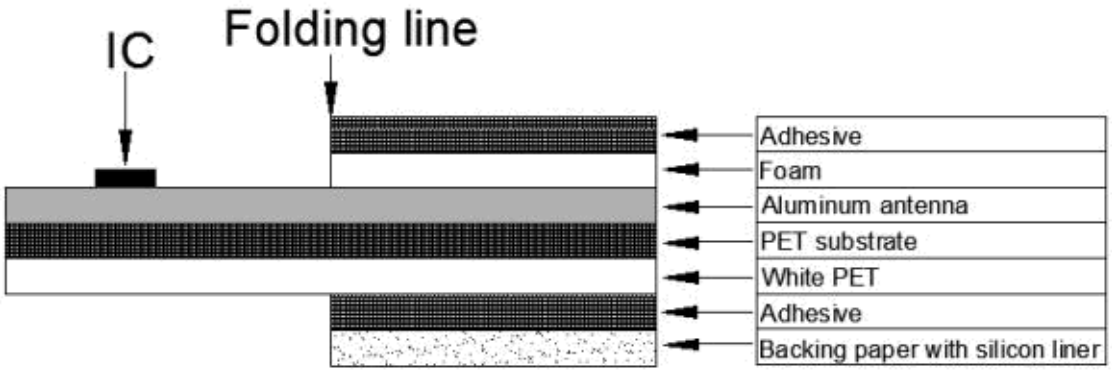
General characteristics of transponder

Operating temperature (electronics parts)	-40 °C / +85 °C	-40 °F / 185 °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	

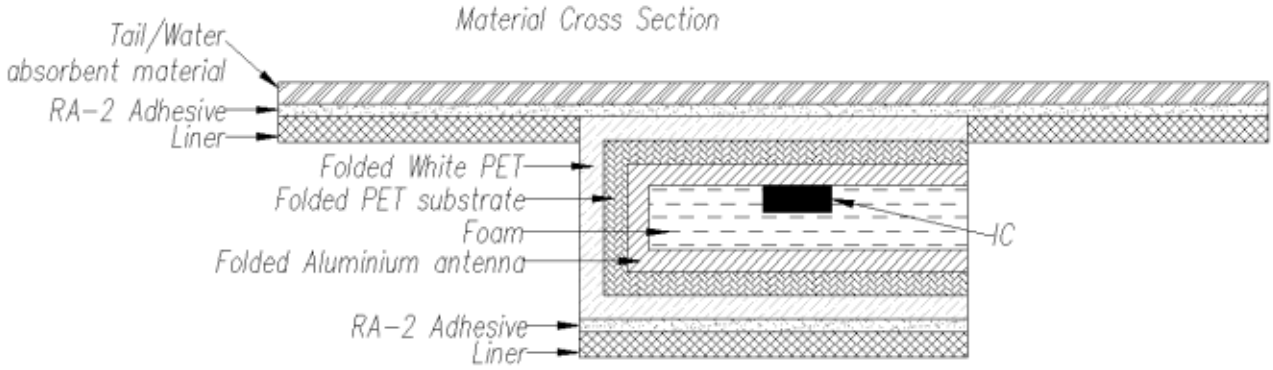
Delivery form

Transponder format	Singulated	
Transponder face material	White PET 50	
Transponder antenna material	Aluminum	
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 % inspection, faulty ones removed	
Minimum delivery yield	100 %	
Box label	Box/Reel number, Material number, Material description, Yield, Qty of functional inlays, Qty of non-functional inlays, Date	

Structure



Material Cross Section



Delivery details

Appearance	Singulated

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.

Products classified as FIS samples have the released for production (RFP) product's form factor, RF performance and IC functionality. FIS samples represent the RFP products in most aspects. FIS samples are delivered without any warranty. During the FIS phase, SMARTRAC reserves the right to modify product specifications without notice.

This technical specification replaces all earlier ones.

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