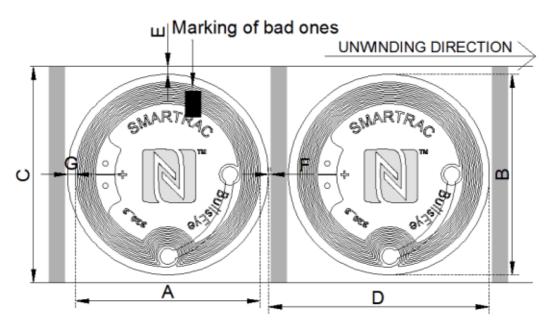


SMARTRAC ((•))

BullsEye NFC Wet Inlay ISO 14 443 A NXP NTAG213 Sales code 3002646

Mechanical dimensions

Α	Antenna size	35 mm	± 0,5 mm	1,378 in
В	Die-cut size	38 mm	± 0,2 mm	1,496 in
С	Web width	41 mm	± 0,5 mm	1,614 in
D	Pitch, length per piece MD	42 mm	± 1,5 mm	1,654 in
E	Die-cut to web edge	1,5 mm	± 1,5 mm	0,059 in
F	Die-cut to register mark	0,5 mm	± 1,0 mm	0,020 in
G	Antenna to die-cut (MD)	1,5 mm	± 1,5 mm	0,059 in
	Thickness of the IC	75 µm	± 10 %	
	Overall thickness of the transponder package (excluding IC and siliconized paper)	136 µm	± 10 %	



Electrical characteristics

Integrated Circuit (IC)	NXP NTAG213		
Air interface protocol	ISO 14 443 A		
Operation frequency	13,56 MHz		
Unloaded resonance frequency	13,37 MHz ± 0,35 MHz		
Memory	144 byte		

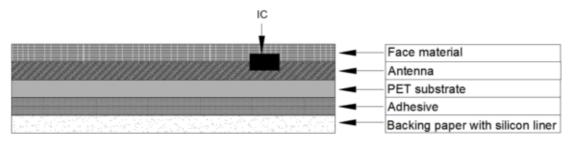
General characteristics of transponder

Operating temperature	-25 °C / +70 °C	-13 °F / 158 °F
(electronics parts)		
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 PET 12	Clear PET 12		
Transponder backing material	Siliconized Paper 56	Siliconized Paper 56		
Transponder antenna material	Aluminum	Aluminum		
Transponder adhesive	RA-5	RA-5		
- labelling temperature	min. +0 °C	min. 32 °F		
- usage temperature	-20 °C - 80 °C	-4 °F - 176 °F		
- peel	min. 2 N / 25 mm (FTM 1)			
Final inspection	100 %, known faulty	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	Needs to be tested by customer		

Structure



Delivery details

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	4000 pcs/reel			
Package size	16000 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.

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

This technical specification replaces all earlier ones.

Version

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