

Circus On-Metal White Wet Inlay

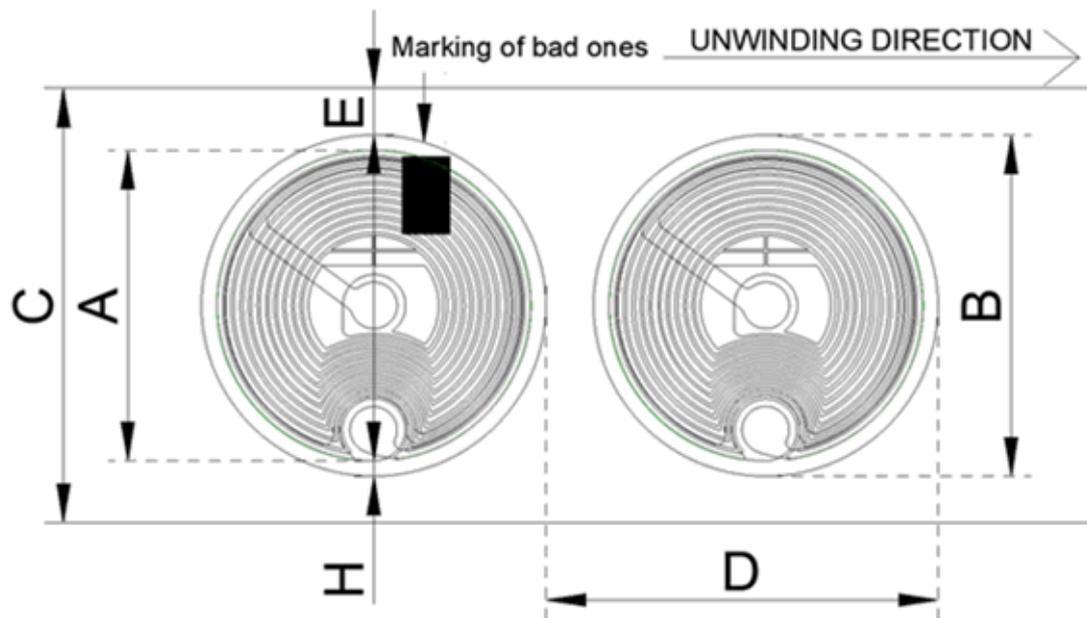
ISO 14 443 A

NXP NTAG213

Sales code 3006703

Mechanical dimensions

A	Antenna size	20 mm	± 0,5 mm	0,787 in
B	Die-cut size	22 mm	± 0,2 mm	0,866 in
C	Web width	28 mm	± 0,5 mm	1,102 in
D	Pitch, length per piece MD	25 mm	± 1,5 mm	0,984 in
E	Die-cut to web edge	3 mm	± 1,5 mm	0,118 in
H	Antenna to die-cut (CD)	1 mm	± 1,0 mm	0,039 in
	Thickness of the IC	75 µm	± 10 %	
	Overall thickness of the transponder package (excluding IC and siliconized paper)	326 µm	± 10 %	
	Thickness of the Ferrite	100 µm	± 10 %	
	Thickness of the Inlay (excluding Ferrite, siliconized paper and IC)	226 µm	± 10 %	



Electrical characteristics

Integrated Circuit (IC)	NXP NTAG213	
Air interface protocol	ISO 14 443 A	
Operation frequency	13,56 MHz	
Unloaded resonance frequency	TBD	
Memory	144 bytes user memory	

General characteristics of transponder

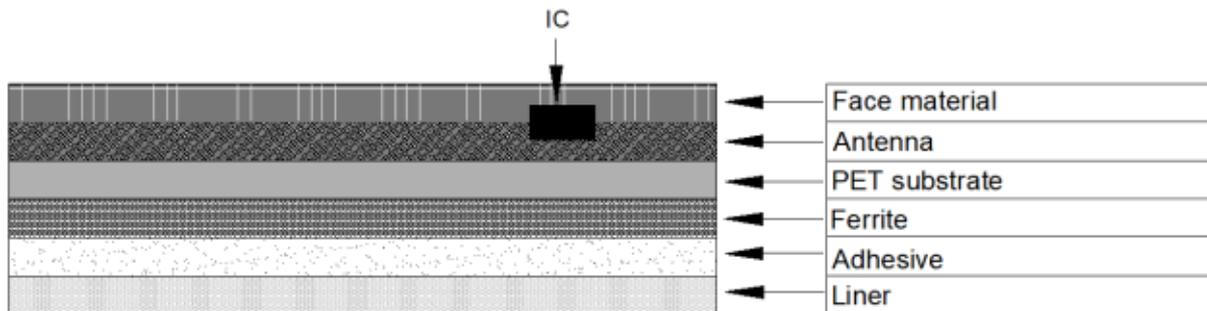
Operating temperature (electronics parts)	-25 °C / +70 °C	-13 °F / 158 °F
ESD voltage immunity	± 2 kV peak HBM	

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	
Transponder face material	White PP 60	
Transponder backing material	Siliconized Paper 56	
Transponder antenna material	Aluminum, crimped coil	
Transponder adhesive	RA-25	
- labelling temperature	min. +10 °C	min. 50 °F
- usage temperature	-40 °C - 93 °C	-40 °F - 199,4 °F
- peel	min. 19.5 N / 25 mm (FTM 2)	
Final inspection	100 %, known faulty ones marked	
Minimum delivery yield	97 %	
Reel Label	Reel number, Material number, Material description, Yield, Qty of functional inlays, Qty of non-functional inlays, Date	
Printability	Flexography and TTR with selected ribbons. Do not print over IC area.	

Structure



Delivery details

Appearance	Single row reel form
Reel core	Paper core inner diameter 76 mm (3 in)
Winding of the reel	Face out
Reel size	2000 pcs/reel

Disclaimer:

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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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