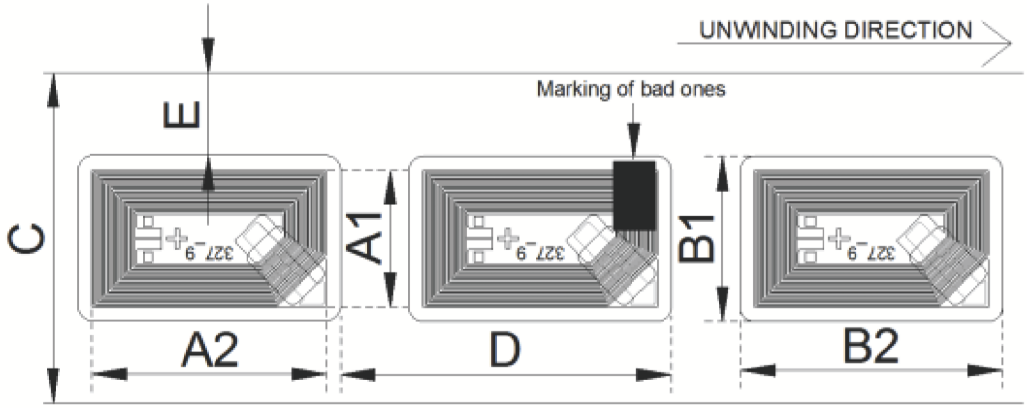
SMARTRAC

Product Specification

Midas NFC Wet Inlay
ISO 14 443 A
NXP NTAG203
Sales code 3002363

Mechanical dimensions

A1 x A2	Coil size	10 x 17 mm	± 0,5 mm	0,394 x 0,669 in
B1 x B2	Die-cut size	12 x 19 mm	± 0,2 mm	0,472 x 0,748 in
C	Web width	24 mm	± 0,5 mm	0,945 in
D	Pitch, length per piece MD	24 mm	± 1,5 mm	0,945 in
E	Die-cut to web edge	6 mm	± 1,5 mm	0,236 in
	Thickness of the IC	120 µm	± 10 %	
	Overall thickness of transponder package (excluding IC and siliconized paper)	162 µm	± 10 %	



Electrical characteristics

Integrated Circuit (IC)	NXP NTAG203
Air interface protocol	ISO 14 443 A
Operation frequency	13,56 MHz
Unloaded resonance frequency	13,55 MHz ± 0,55 MHz
Memory	144 byte

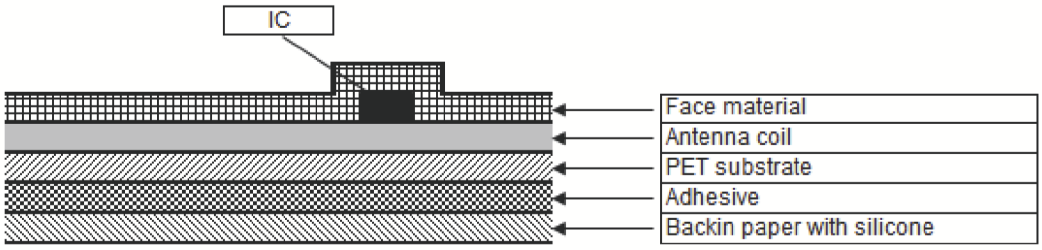
General characteristics of transponder

Operating temperature (electronics parts)	-20 °C / +70 °C	-4 °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	Clear PET 12	
Transponder backing material	Siliconized Paper 56	
Transponder antenna material	Copper	
Transponder adhesive	RA-2	
- labelling temperature	min. +5 °C	min. +41 °F
- usage temperature	-40°C - 150 °C	-40°F - 302 °F
- peel	min. 8 N / 25 mm (FTM 2)	
Final inspection	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 customer	

Structure



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	5000 pcs/reel
Package size	5000 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.

This technical specification replaces all earlier ones.

Version	1
Update date	1 June 2012
Author	SMARTRAC / k731743
Approved	SMARTRAC / 01.06.2012 k737920

HALOGEN FREE
MEETS IEC 61249-2-21

atlasRFIDstore.com
1.888.238.1155 • Inside USA
1.205.383.2244 • Outside USA
info@atlasRFIDstore.com • www.atlasRFIDstore.com