



bibliotheca RFID tag™ squareClear

ISO 15 693, ISO 18 000-3 Mode 1, NXP ICode SLIX2

Item Code: TAG000050

mechanical dimensions

A1 x A2	Antenna size	47 x 47 mm	± 0,5 mm	1,850 x 1,850 in
B1 x B2	Die-cut size	50 x50 mm	± 0,2 mm	1,969 x 1,969 in
C	Web width	54 mm	± 0,5 mm	2,126 in
D	Pitch, length per piece MD	56 mm	± 1,5 mm	2,205 in
E	Die-cut to web edge	2 mm	± 1,5 mm	0,079 in
G	Antenna to die-cut (MD)	1,5 mm	± 1,5 mm	0,059 in
H	Antenna to die-cut (CD)	1,5 mm	± 1,5 mm	0,059 in
U	Die-cut corner radius	3 mm		0,118 in
	Thickness of the IC	127 µm	± 15 %	
	Overall thickness of transponder package (excluding IC and siliconized paper)	136 µm	± 10 %	
	Thickness of the siliconized paper	56 µm	± 5 %	

electrical characteristics

Integrated Circuit (IC)	NXP ICode SLIX2
Air interface protocol	ISO 15 693, ISO 18 000-3 Mode 1
Operating frequency	13,56 MHz
Unloaded resonance frequency	14,10 MHz ± 0,35 MHz
Memory	2.5k bits user memory

general characteristics of transponder

Operating temperature (electronics parts)	-40 °C / +85 °C	-40 °F / 185 °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	Aluminum, crimped coil
Transponder adhesive	Neutral pH Radiation Cured UV Acrylic
labelling temperature	min. +0 °C, min. 32 °F
usage temperature	-20 °C - 80 °C, -4 °F - 176 °F
peel	min. 10 N / 25 mm (FTM 1)
Final inspection	100 %, known faulty ones marked
Minimum delivery yield	97 %
Printability	Needs to be tested by customer

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
Standard reel size	2000 pcs/reel, Diameter:< 205 mm
Package size	6000 pcs/box, Deliveries only in full packages, 3 rolls per box

bibliotheca label performance guarantee

All bibliotheca RFID tag™ products must pass accelerated aging testing at 85°C and at 85% humidity for 15 weeks which included performance testing. Our entire range of RFID tag™ products, when handled according to our recommended practices, are guaranteed for the lifetime of the item to which they are affixed. Data Retention guaranteed for 50 years with a minimum of 100,000 read/write cycles.

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