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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# HF MAGICSTRAP® Data Sheet

## LXMSAPHA17-176



### 1, General Descriptions

HF MAGICSTRAP® is a small size HF band RFID IC module, including embedded antenna. This complies with ISO14443/NFC Forum Type2 standard. It can be used globally with high performance even in small form factor.

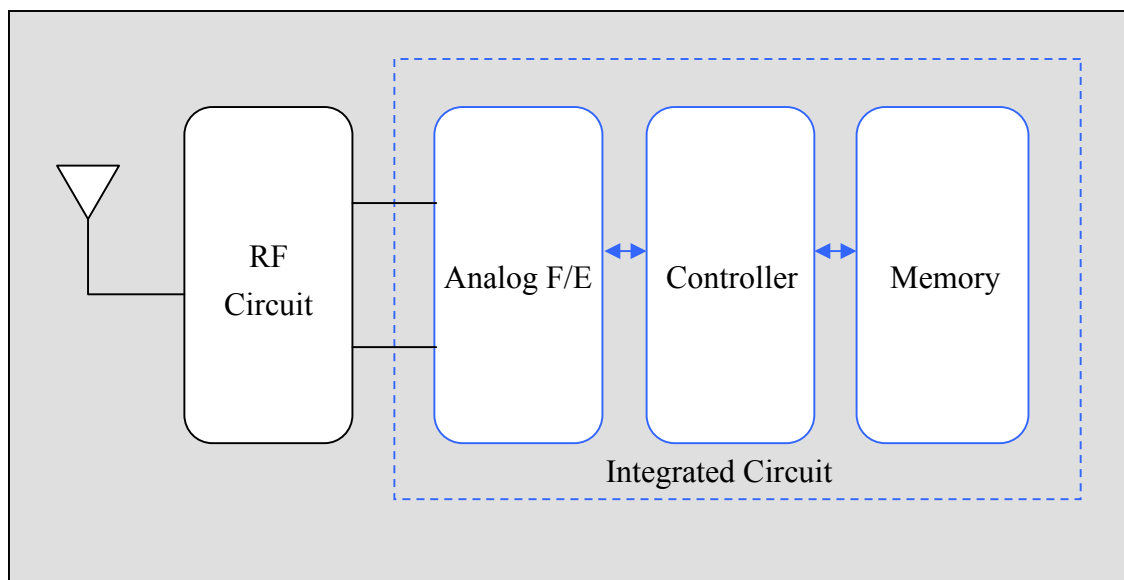


#### **[Features]**

- ISO14443/NFC Forum Type2 Compliance
- Operating frequency of 13.56MHz
- Embedded antenna
- Using NXP NTAG213, 1152bit user memory
- Small package (8.3X8.3X0.7mm typ.)
- Completely green material and RoHS Compliant.
- Bi-adhesive on the back size.

### 2, Block Diagram

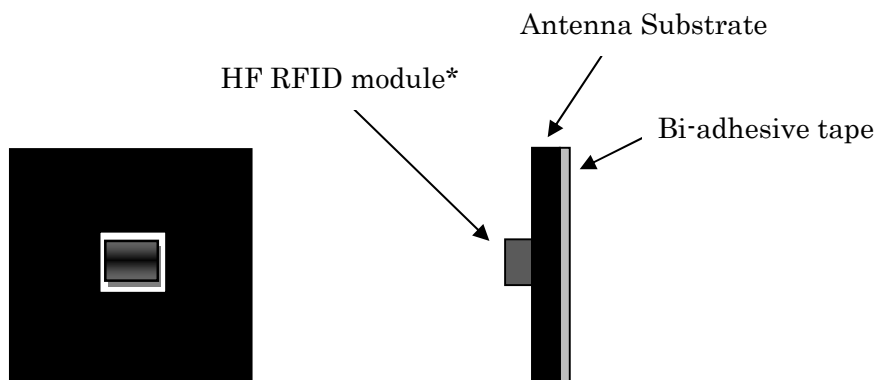
Figure.1 shows block diagram.



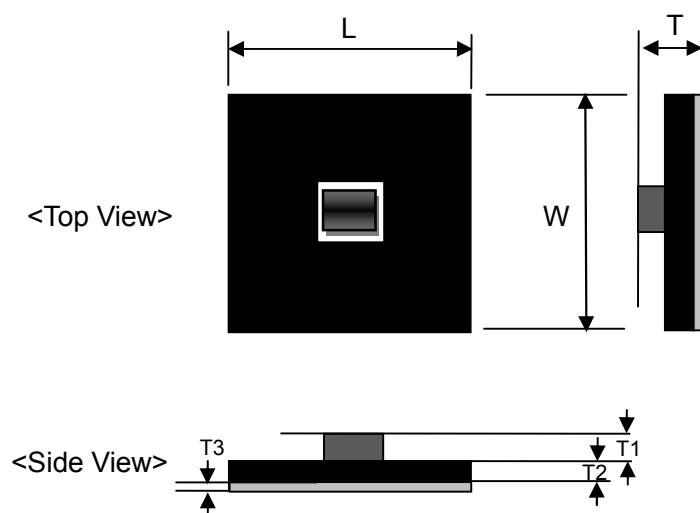
### **3. Mechanical Information**

#### **3-1. Construction and Dimension**

[Construction]



[Dimension]



[mm]

Mark	Dimensions
L	$8.3 \pm 0.2$
W	$8.3 \pm 0.2$
T	0.70 typ. / 0.80 max
T1	0.45 typ.
T2	0.15 typ.
T3	0.10 typ.

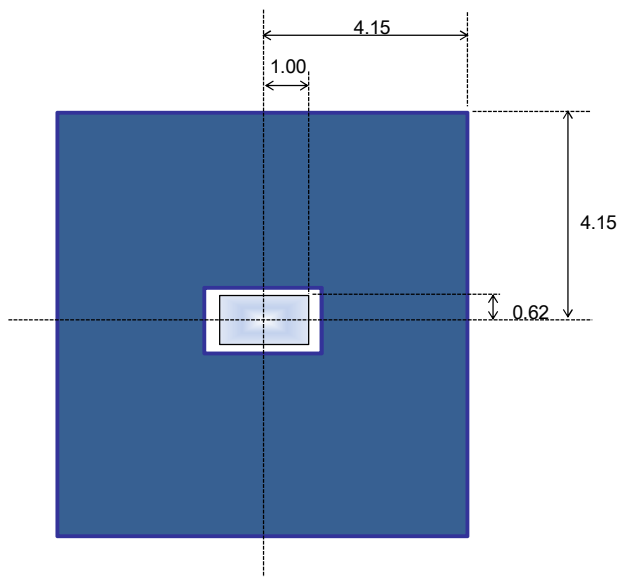
**Fig.2 Package Dimension**

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[Drawing]



### **4. Electrical performance**

#### **4-1. Reading range (reference only)**

25mm\*

\*Reader/Writer : TI TRF7960 Reference Board

Reader/Writer antenna : 37x54mm on TI TRF7960 Reference Board

Output Power of Reader/Writer : 200mW

### **5. Operating Temperature**

-40degC ~ +70degC

### **6. RoHS compliance**

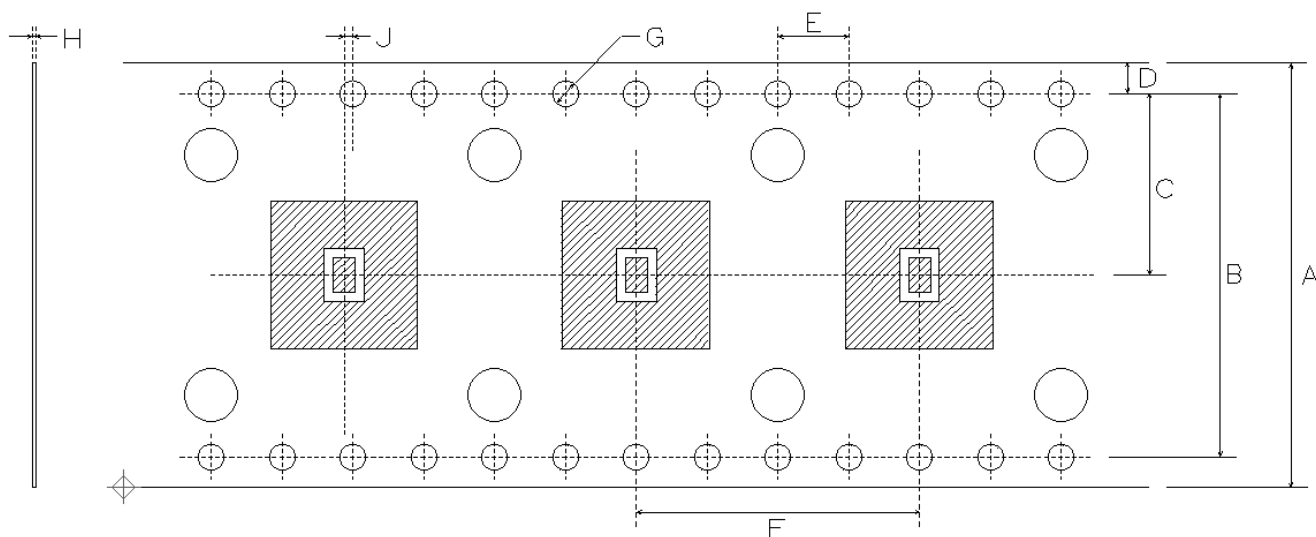
This product is compliant with RoHS directive

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## 7, Packing Information

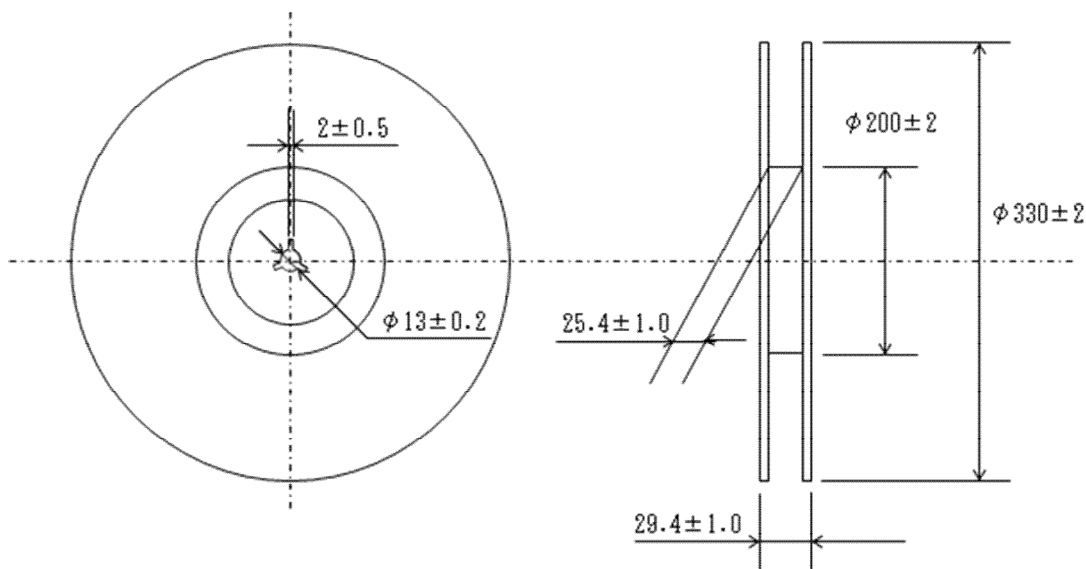
(1) Tag position on carrier sheet



Unit : [mm]

Mark	Dimension	Mark	Dimension
A	$24.0 \pm 0.3$	F	$16.0 \pm 0.4$
B	$20.5 \pm 0.1$	G	$\phi 1.5 \pm 0.1$
C	$10.25 \pm 0.5$	H	$0.08 \pm 0.03$
D	$1.75 \pm 0.1$	J	$0.0 \pm 0.5$
E	$4.0 \pm 0.1$		

(2) Dimension of Reel



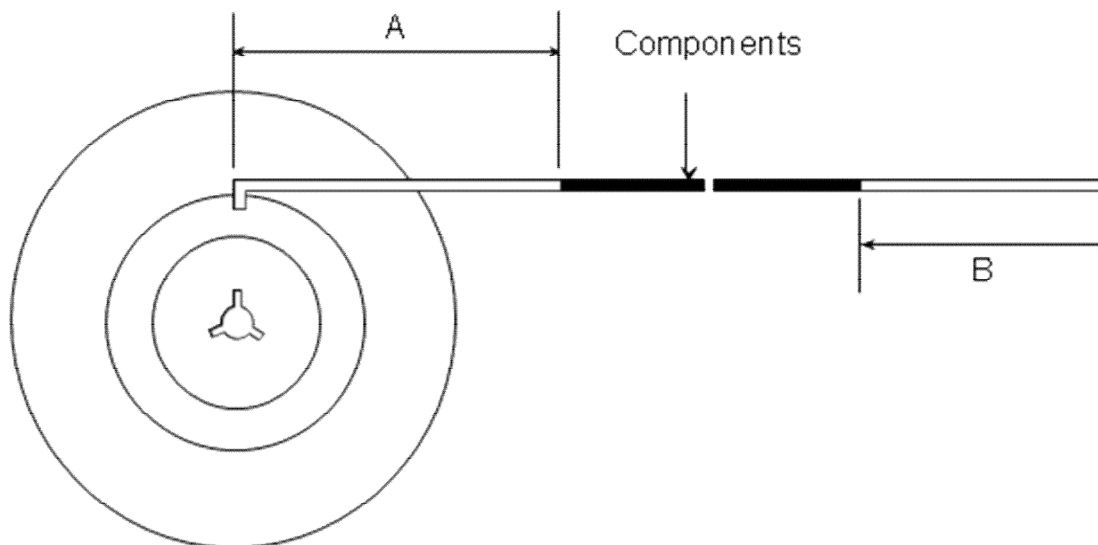
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# HF MAGICSTRAP® Data Sheet

## LXMSAPHA17-176



(3)Leader and Tail tape



Mark	Items	Minimum length (mm)
A	Tail	800-900
B	Leader no cover tape	1900-2000

(4)Packaging unit : 2500 pcs/Reel

(5)Material :     Base tape .....PET  
                   Reel.....Plastic

### 8. Contact window

URL : <http://www.murata.com/products/rfid/index.html>

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