

# 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.

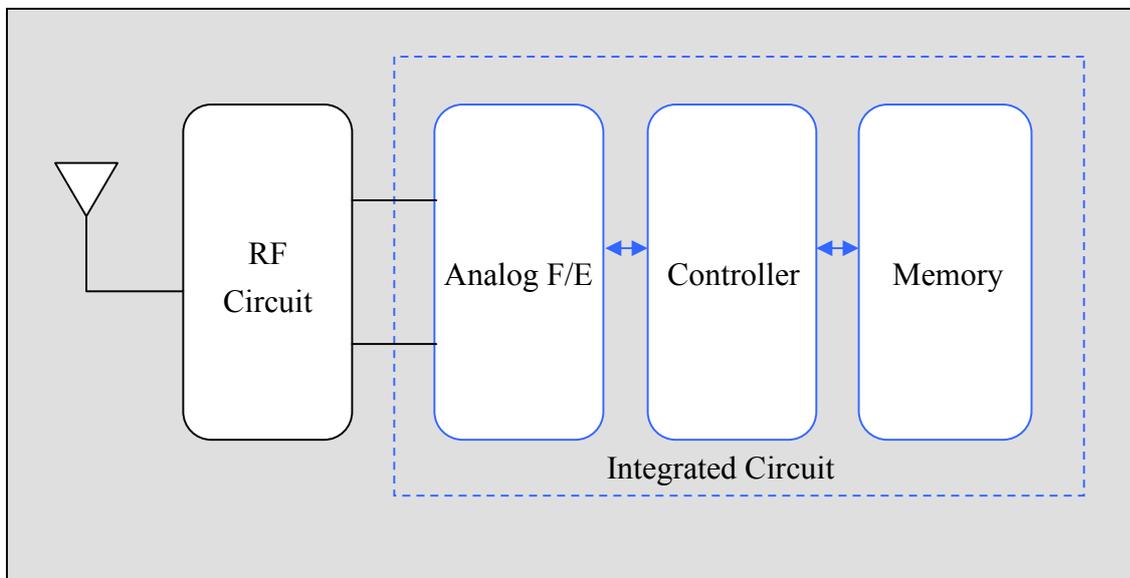


#### **[Features]**

- 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

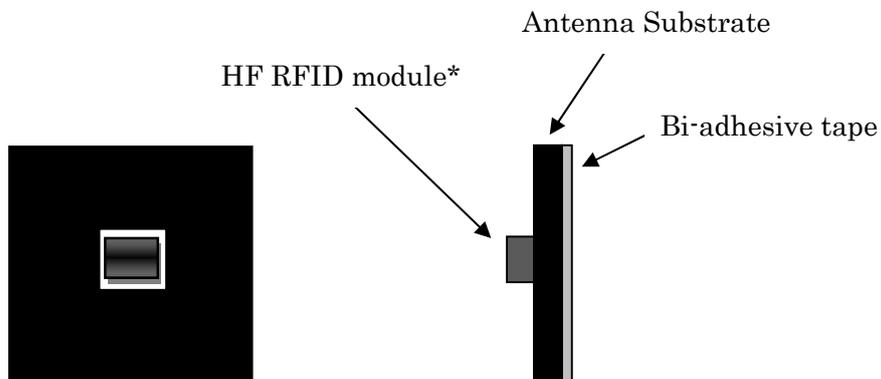
Figure.1 shows block diagram.



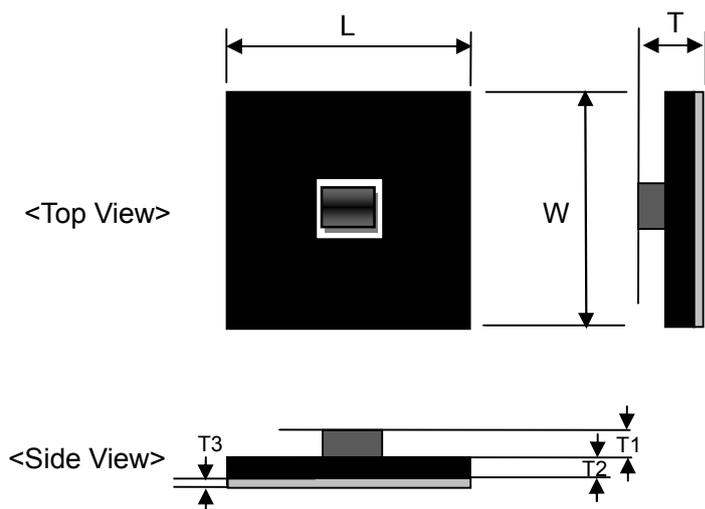
**3. Mechanical Information**

**3-1. Construction and Dimension**

[Construction]



[Dimension]

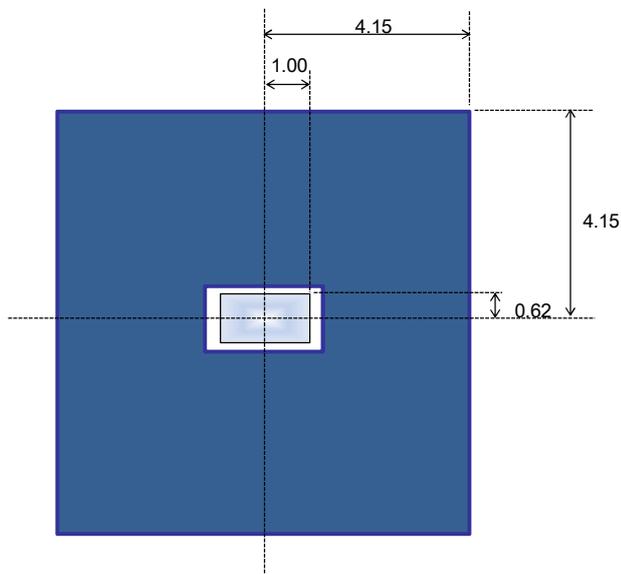


[mm]

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**

[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**

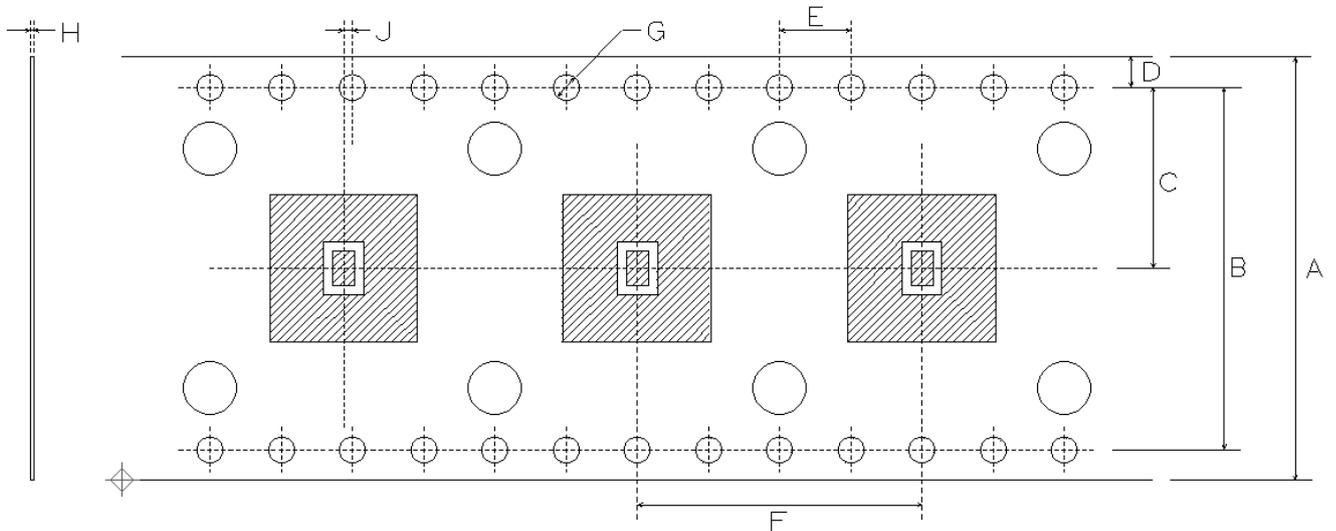
-40degC ~ +70degC

#### **6. RoHS compliance**

This product is compliant with RoHS directive

**7, Packing Information**

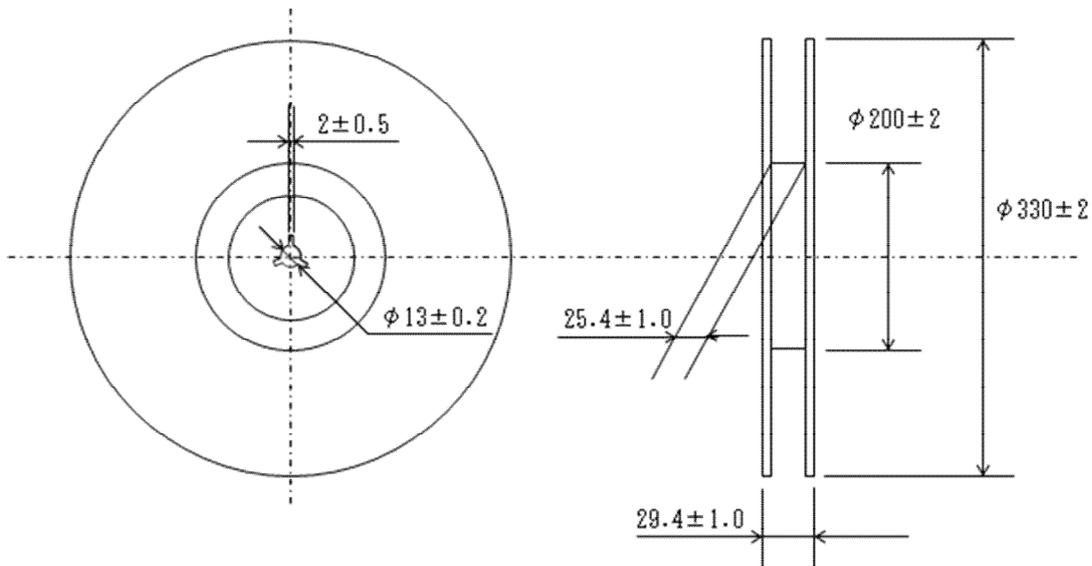
(1) Tag position on carrier sheet



Unit : [mm]

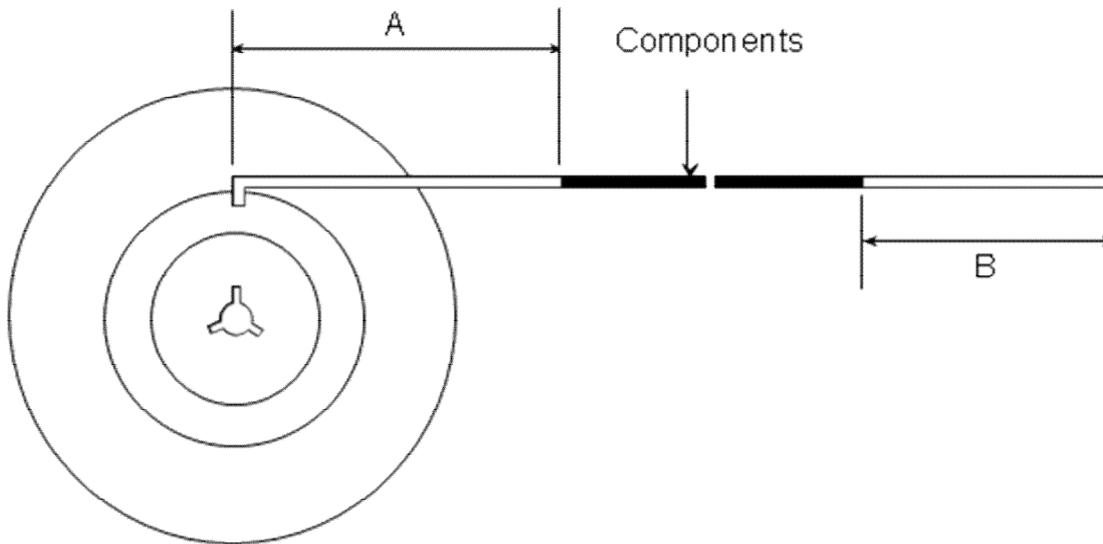
Mark	Dimension	Mark	Dimension
A	24.0±0.3	F	16.0±0.4
B	20.5±0.1	G	φ1.5±0.1
C	10.25±0.5	H	0.08±0.03
D	1.75±0.1	J	0.0±0.5
E	4.0±0.1		

(2) Dimension of Reel



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(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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