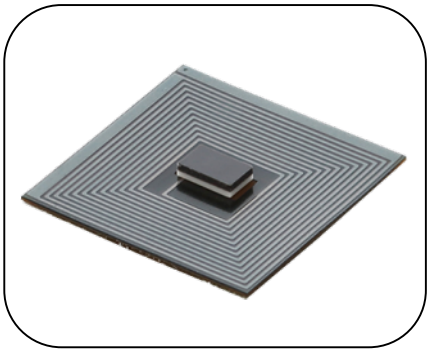
HF RFID Tag Data sheet
LXMSAPHA08-136

1, General Descriptions

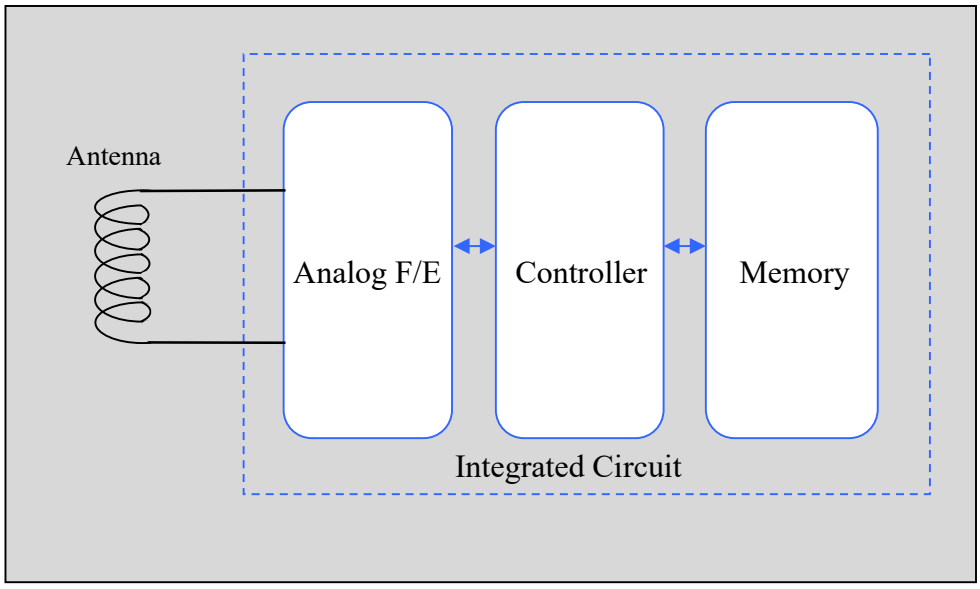


LXMSAPHA08-136 is a small size HF band
RFID IC module, including embedded antenna
This complies with ISO15693/ NFC Forum Type5 standard.
It can be used globally with high performance
even in small form factor.

[Features]

-Small and Robust package design
- HF band (13.56MHz)
- ISO15693/ NFC Forum Type5 Compliant
- Size is 8.3X8.3X0.8mm
- Using NXP ICODE SLIX
- Reading range: 42mm *Reference
- RoHS compliant
- Bi-adhesive on the back size

2, Block Diagram

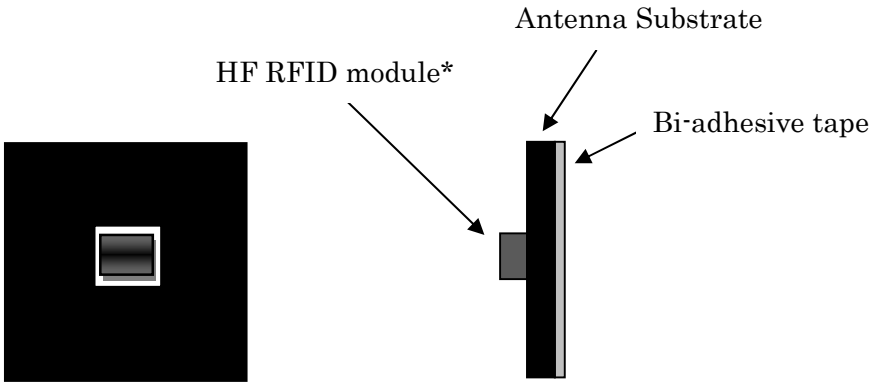


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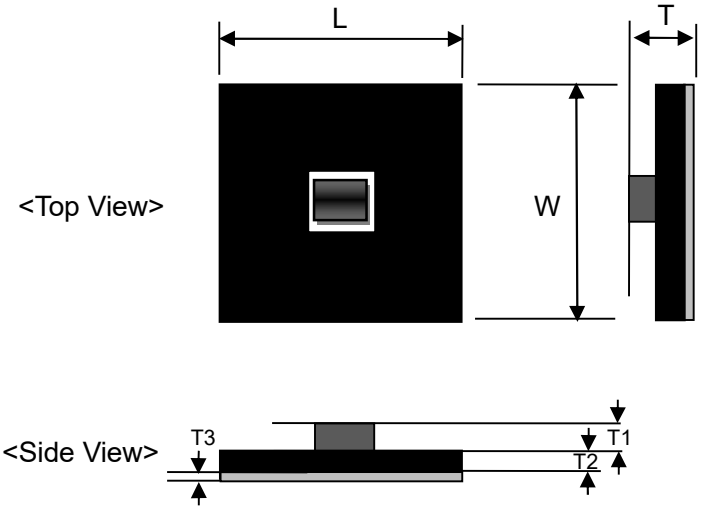
3, Mechanical Information

3-1. Construction and Dimension

[Construction]



[Dimension]



Unit : [mm]

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

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4. Electrical Performance

4-1. Frequency range

13.56MHz

4-2. IC / Memory size

Parameter		Description	Remarks
IC		NXP ICODE SLIX	
Protocol		ISO15693	
		NFC Forum Type5	
Memory	UID	64 bit	Read Only
	User	896bit	Read/Write
Data retention Time		※50 years	Tamb = 22℃

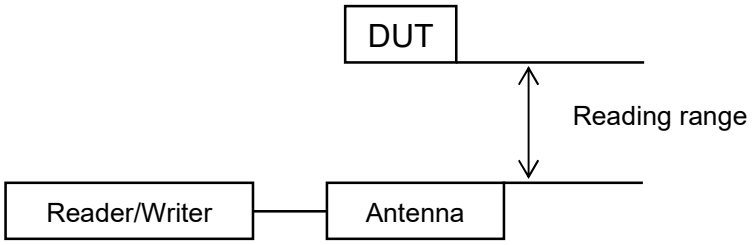
※Reference value

5. Reading range (reference only)

Reading range varies by Output Power of Reader/Writer and an antenna.

HF band(13.56MHz) : 42mm

*Measurement setup



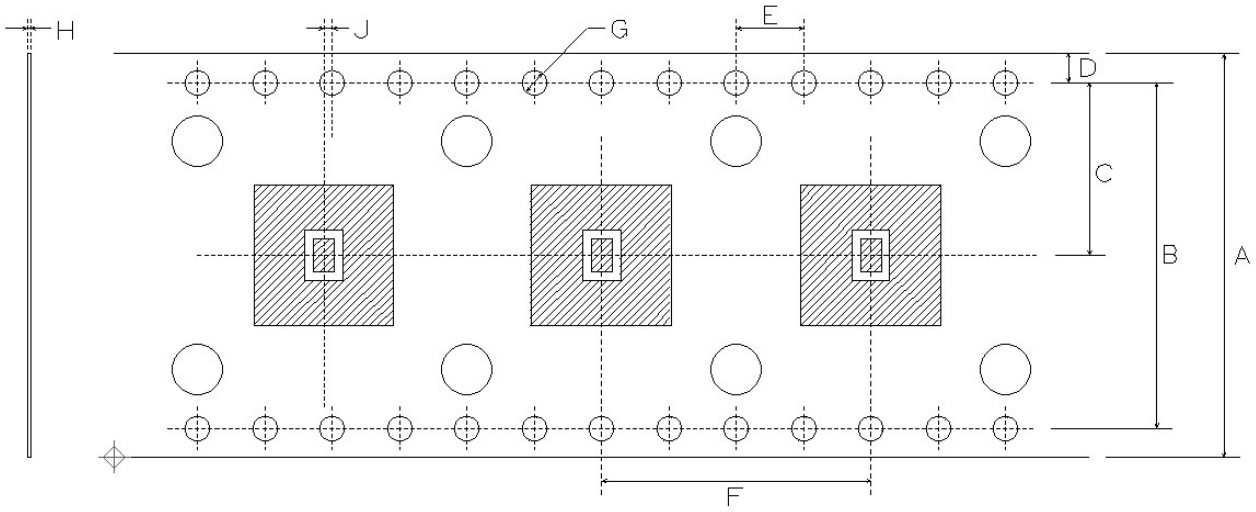
6. Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T_{stg}	Storage temperature	-40	+85	ºC
T_{amb}	Operating temperature	-40	+85	ºC

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7. Packaging

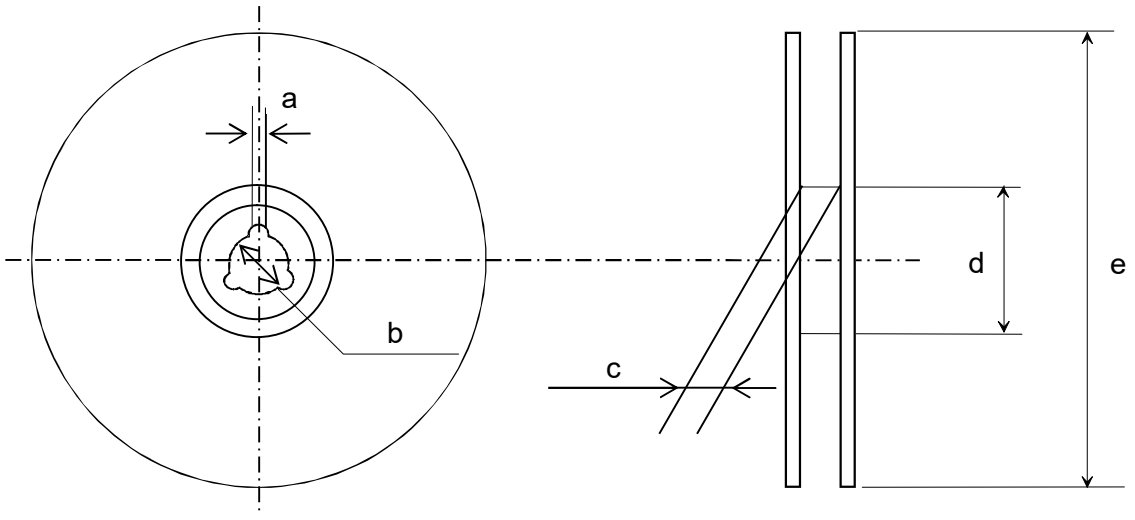
7-1. Dimensions of tape



Unit : mm

Mark	Dimenion	Mark	Dimenion
A	24.0±0.3	F	16.0±0.1
B	20.5±0.1	G	φ1.5±0.1
C	10.25±0.05	H	0.075
D	1.75±0.1	J	0.0±0.3
E	4.0±0.1		

7-2. Dimensions of reel

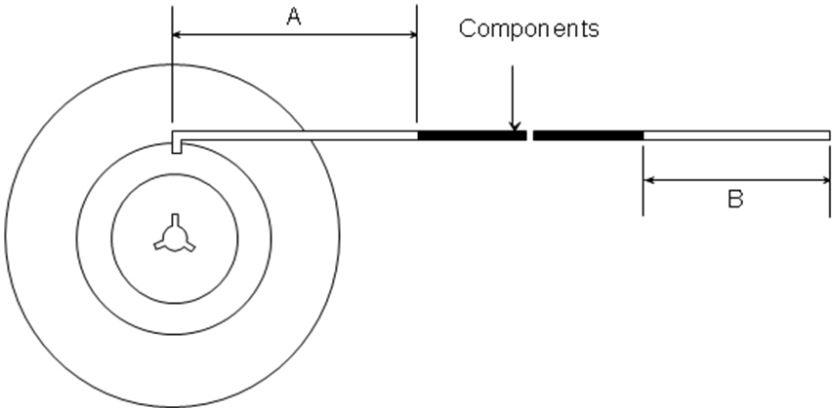


Unit : mm

Symbol	a	b	c	d	e
Dimension	2.0+/-0.5	Φ13.0+/-0.2	25.4+/-1.0	(Φ200)	(Φ330)

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7-3. Leader and Tail tape



Symbol	Item	Minimum length (Unit:mm)
A	Tail	800
B	Leader no cover tape	1900

7-4. Quantity per reel

2,500 pcs

7-5. Minimum order quantity

2,500 pcs

7-6. Material

Base tape : Plastic

Reel : Plastic

Base tape and Reel have an anti-ESD function.

8. Contact window

URL: http://www.murata.com/products/rfid

Email: magicstrap@murata.com

For any inquiries/queries, please feel free to contact us.

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NOTICE

1. Storage Conditions:

To avoid damaging, be sure to observe the following points.

- Store products where the ambient temperature is 15 to 35 °C and humidity 45 to 75% RH.

(Packing materials, In particular, may be deformed at the temperature over 40 °C.).

- Store products in non corrosive gas (Cl_2, NH_3,SO_2, No_x, etc.).
- Stored products should be used within 6 months of receipt.

2. Handling Conditions:

Be careful in handling or transporting products because excessive stress or mechanical shock may break products.

3. Operational Environment Conditions:

Products are designed to work under normal environmental conditions (ambient temperature, humidity and pressure). Therefore, products have no problems to be used under the similar conditions to the above-mentioned. However, if products are used under the following circumstances, it may damage products and leakage of electricity and abnormal temperature may occur.

- In an atmosphere containing corrosive gas (Cl_2, NH_3, SO_x, NO_x etc.).F
- In an atmosphere containing combustible and volatile gases.
- In a dusty environment.
- Direct sunlight
- Water splashing place.
- Humid place where water condenses.
- In a freezing environment.

If there are possibilities for products to be used under the preceding clause, consult with Murata before actual use.

If static electricity is added to this product, degradation and destruction may be produced.
Please use it after consideration enough so that neither static electricity nor excess voltage is added at the time of an assembly and measurement.

If product malfunctions may result in serious damage, including that to human life, alternative measures of the operation and design must be taken to secure the safety.

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4. Cleaning Conditions:

If the cleaning will be applied, please check with Murata in advance since the product may degrade or get broken.

5. Limitation of Applications:

Please contact us before using our products for the applications listed below which require especially high reliability for the prevention of defects which might directly cause damage to the third party's life, body or property.

(1) Aircraft equipment
(2) Aerospace equipment
(3) Undersea equipment
(4) Power plant control equipment
(5) Medical equipment
(6) Transportation equipment (vehicles, trains, ships, etc.)
(7) Traffic signal equipment
(8) Disaster prevention / crime prevention equipment
(9) Data-processing equipment
(10) Application of similar complexity and/or reliability requirements to the application listed in the above.

⚠ **Note:**

Please make sure that your product has been evaluated and confirmed against your specifications when our product is attached to your product.

All the items and parameters in this product specification have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment agreed upon between you and us. You are requested not to use our product deviating from such agreement.

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