

## Multilayer Antenna

For 2400-2484MHz

# ANT016008LCS2442MA1

1.6x0.8mm [EIA 0603]\*

\* Dimensions Code JIS[EIA]



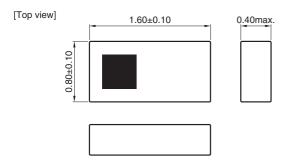
### **Multilayer Antenna**

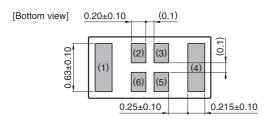
For 2400-2484MHz

#### **Conformity to RoHS Directive**

# ANT016008LCS2442MA1

#### **SHAPES AND DIMENSIONS**

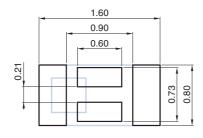




Te	Terminal functions						
1	Radiator electrode						
2	Dummy pad						
3	Dummy pad						
4	Feed point						
5	Dummy pad						
6	Dummy pad						

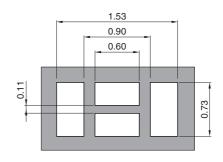
Dimensions in mm

#### ■ RECOMMENDED LAND PATTERN



Dimensions in mm

#### **SOLDER RESIST PATTERN**



Dimensions in mm

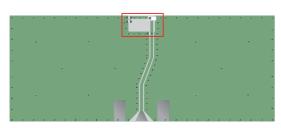
RoHS Directive Compliant Product: See the following for more details.https://product.tdk.com/info/en/environment/rohs/index.html

<sup>•</sup> All specifications are subject to change without notice.

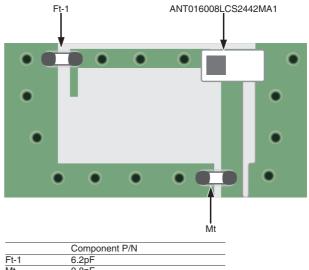
<sup>•</sup> Before using these products, be sure to request the delivery specifications.



#### **EVALUATION BOARD**

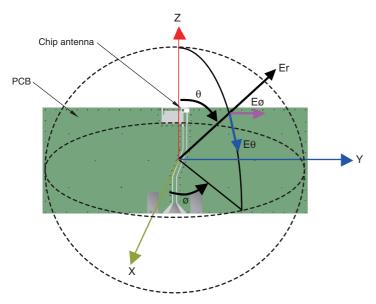


PCB size: 50mm x 10mm x 1mm Antenna area : 5 x 3 mm



	Component P/N	
Ft-1	6.2pF	
Mt	0.8pF	

#### ☐ Measurement condition for Radiation Pattern



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#### **ELECTRICAL CHARACTERISTICS**

Item	Frequency Range (MHz)	Min.	Тур.	Max.		
VSWR	2400 to 2484	_	1.60	3.0		
Polarization			Linear			
PCB size (mm)		50×20				
Antenna keep-out area (mm)			5×3			
Characteristic Impedance (Ω)		50 (Nominal)				

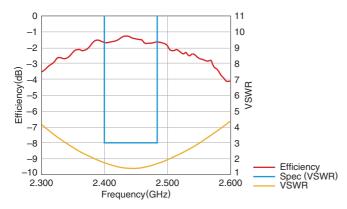
 $<sup>\</sup>boldsymbol{\cdot}$  This is typical antenna performance with the standard PCB.

#### **TEMPERATURE RANGE**

Operating temperature	Storage temperature
(°C)	(°C)
-40 to +85	-40 to +85

#### FREQUENCY CHARACTERISTICS

#### **EFFICIENCY AND VSWR**



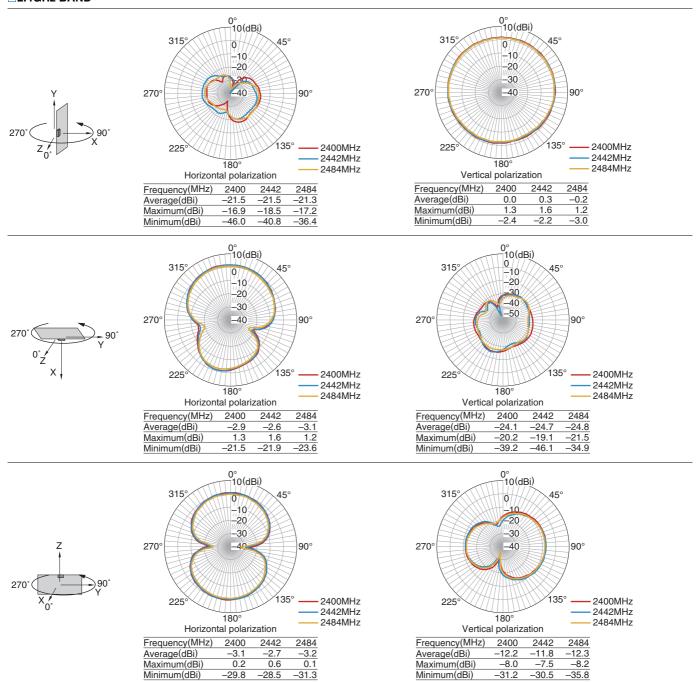
• Tested antenna has been soldered. Evaluation board size is 50x20x1 mm.

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#### **RADIATION PATTERNS**

#### 2.4GHz BAND

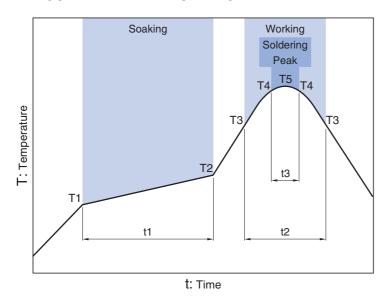


 $\bullet$  Tested antenna has been soldered. Evaluation board size is 50×20×1 mm.

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#### ■ RECOMMENDED REFLOW PROFILE



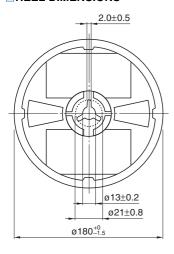
Soaking			Working		Soldering Peak	Soldering Peak		
Temp.		Time	Temp.	Time	Temp.	Time	Temp.	
T1	T2	t1	Т3	t2	T4	t3	T5	
150°C	180°C	60 to 120s	230°C	30 to 60s	247 to 253°C	within 10s	260°C max.	

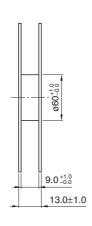
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#### **■PACKAGING STYLE**

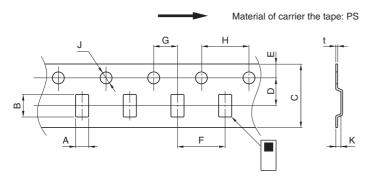
#### □REEL DIMENSIONS





Dimensions in mm

#### **TAPE DIMENSIONS**



Dimensions in mn									sions in mm	
Α	В	С	D	Е	F	G	Н	J	K	t
0.97±0.05	1.8±0.05	8.0±0.2	3.5±0.05	1.75±0.1	4.0±0.1	2.0±0.05	4.0±0.1	1.5+0.1/-0	0.55max.	0.25±0.05

#### **PACKAGE QUANTITY**

Standard package quantity						
(pieces/reel)						
4,000						

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#### REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

#### SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

#### **⚠** REMINDERS

The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below or for any other use exceeding the range or conditions set forth in this catalog.

- (1) Aerospace/Aviation equipment
- (2) Transportation equipment (cars, electric trains, ships, etc.)
- (3) Medical equipment
- (4) Power-generation control equipment
- (5) Atomic energy-related equipment
- (6) Seabed equipment
- (7) Transportation control equipment

- (8) Public information-processing equipment
- (9) Military equipment
- (10) Electric heating apparatus, burning equipment
- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

When using this product in general-purpose applications, you are kindly requested to take into consideration securing protection circuit/ equipment or providing backup circuits, etc., to ensure higher safety.

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