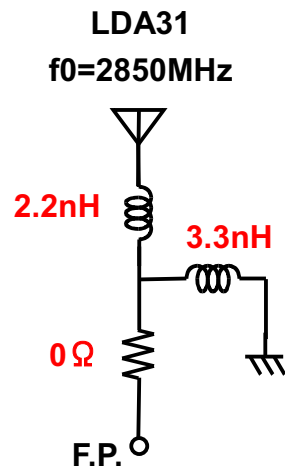


# [ Impedance ]

## LDA31 series

### Matching Circuit

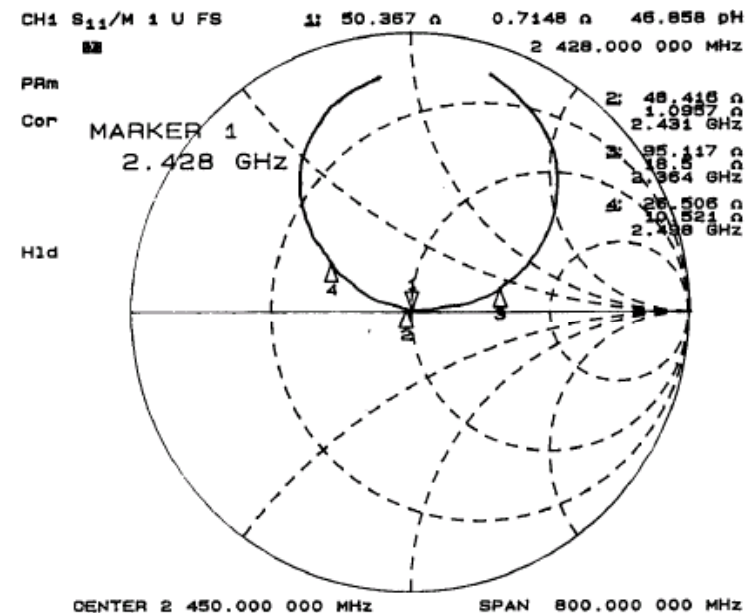
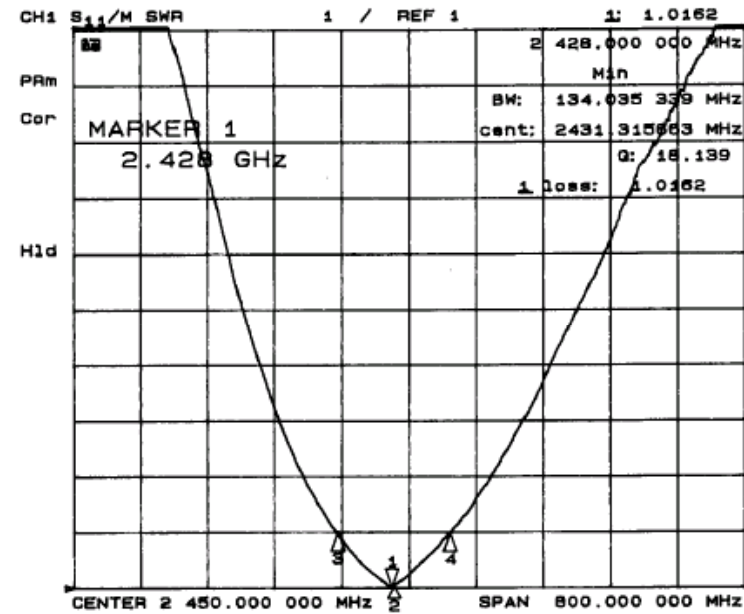


(L chip) LQP15MN  
(R chip) ERJ2GE

Center Frequency: 2440MHz

VSWR<2: Band Width =85MHz

VSWR<3: Band Width =137MHz



# [ Antenna Gain ]

## LDA31 series

### 2400MHz

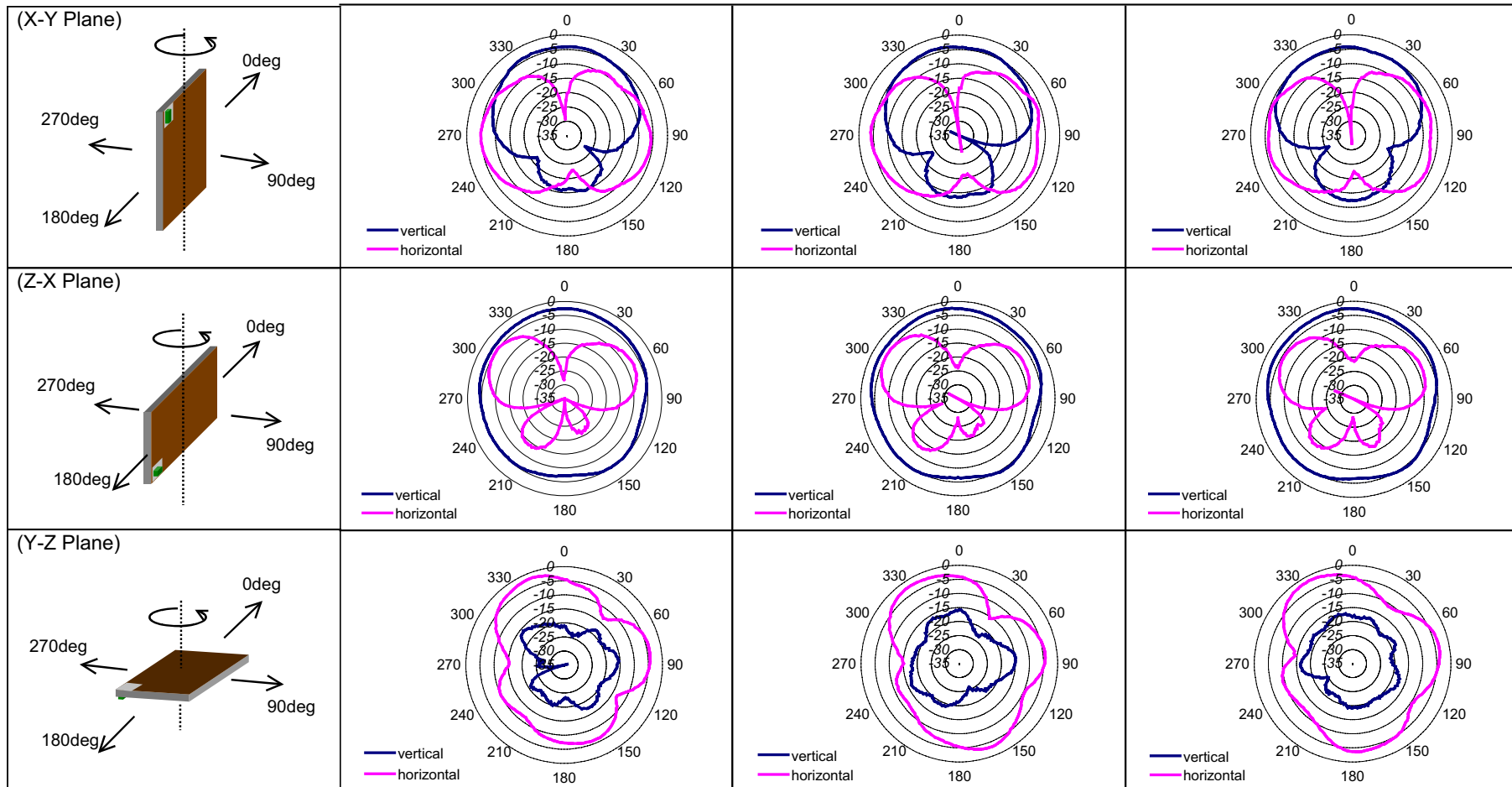
Plane	polarization	Gain [dBd]	
		Max	Ave.
X-Y	vertical	-3.9	-8.4
X-Y	horizontal	-4.9	-8.8
Z-X	vertical	-2.6	-4.5
Z-X	horizontal	-4.9	-11.4
Y-Z	vertical	-15.5	-19.7
Y-Z	horizontal	-1.9	-6.8
Total Ave. Gain [dBi]		-3.0	

### 2442MHz

Plane	polarization	Gain [dBd]	
		Max	Ave.
X-Y	vertical	-3.8	-8.3
X-Y	horizontal	-4.1	-8.4
Z-X	vertical	-2.4	-4.2
Z-X	horizontal	-4.9	-11.3
Y-Z	vertical	-14.8	-18.7
Y-Z	horizontal	-2.3	-6.2
Total Ave. Gain [dBi]		-2.6	

### 2484MHz

Plane	polarization	Gain [dBd]	
		Max	Ave.
X-Y	vertical	-4.1	-8.5
X-Y	horizontal	-5.7	-9.0
Z-X	vertical	-2.5	-4.3
Z-X	horizontal	-5.7	-11.9
Y-Z	vertical	-16.4	-19.1
Y-Z	horizontal	-1.7	-5.8
Total Ave. Gain [dBi]		-2.7	



## Chip Multilayer Antenna (Preliminary)

### 1. Characteristics ( at -40 ~ + 85 °C)

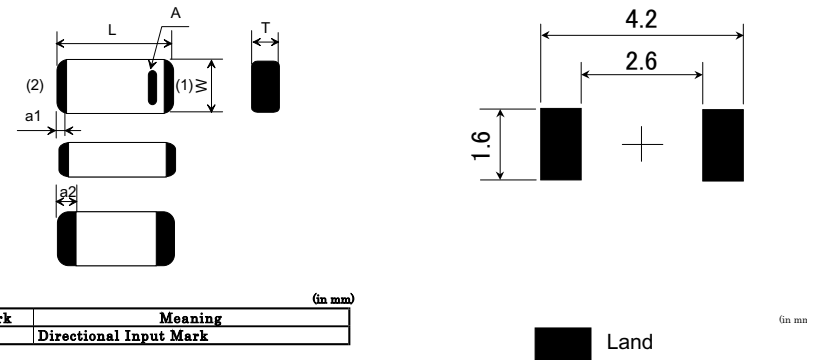
Murata P/N (2G-Band)	Center frequency (MHz)	Tolerance of center frequency (MHz)	Nominal Impedance	Power Capacity (mW max)
LDA312G7313F-237	2730.00	+/- 68.00	50 ohm	500
LDA312G8513F-238	2850.00	+/- 72.00		
LDA312G9813F-239	2980.00	+/- 75.00		
LDA313G0313F-240	3030.00	+/- 76.00		
LDA313G1413F-241	3140.00	+/- 79.00		
LDA313G2713F-242	3270.00	+/- 82.00		
LDA313G3313F-243	3330.00	+/- 84.00		
LDA313G5813F-244	3580.00	+/- 90.00		
LDA313G8813F-245	3880.00	+/- 98.00		

Murata P/N (5G-Band)	Center frequency (MHz)	Tolerance of center frequency (MHz)	Nominal Impedance	Power Capacity (mW max)
LDA315G2013F-246	5200.00	+/- 135.00	50 ohm	500
LDA315G5013F-247	5500.00	+/- 143.00		
LDA315G8013F-248	5800.00	+/- 151.00		
LDA316G0013F-249	6000.00	+/- 157.00		
LDA316G2013F-250	6200.00	+/- 162.00		
LDA317G8013A-251	7800.00	+/- 225.00		

\* The above-mentioned values have been obtained according to our own measuring methods(testing jig : Fig.1,Zo=50 W) and may vary depending on the circuit, in which this component is actually incorporated.

You are, therefore, kindly requested to test the performance of this component incorporating in your set.

### 2. Construction,Dimensions&Marking 3. Land Pattern



Mark	Meaning
A	Directional Input Mark

Mark	Dimension	Mark	Dimension
L	3.2±0.2	a1	0.2±0.2
W	1.6±0.2	a2	0.5±0.2
T	1.2+0.1/-0.2	-	-

#### TERMINAL CONFIGURATION

Terminal No.	Terminal Name	Terminal No.	Terminal Name
(1)	Feeding Point	(2)	NC

Terminal of "NC" should be connected to the floating land.

### 4. Marking

#### LDA31 Series for 2.4GHz-Band

LDA312G7313F-237	LDA312G8513F-238	LDA312G9813F-239
LDA313G0313F-240	LDA313G1413F-241	LDA313G2713F-242
LDA313G3313F-243	LDA313G5813F-244	LDA313G8813F-245

#### LDA31 Series for 5.2GHz-Band

LDA315G2013F-246	LDA315G5013F-247	LDA315G8013F-248
LDA316G0013F-249	LDA316G2013F-250	LDA317G8013A-251