



Data Sheet of SAW Components



Note : Murata SAW Component is applicable for Cellular /Cordless phone (Terminal) relevant market only.

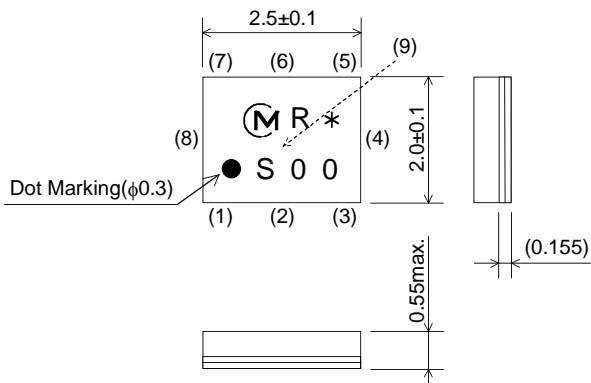
Please also read caution at the end of this document.

SAW DPX FOR UMTS BAND5

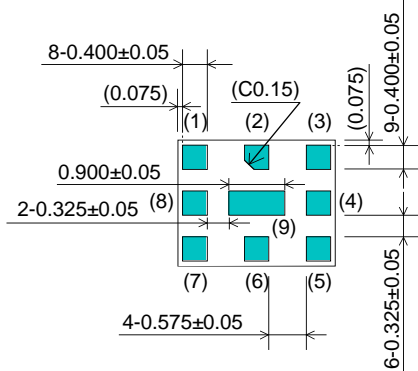
Murata part number :SAYFP836MCB0F00 [Tx→ANT]

Package Dimensions

Top View



Bottom View



Marking
: Laser Printing

(1) : Tx
(3)(4) : Rx
(6) : Ant
Others : Ground

Unit : mm

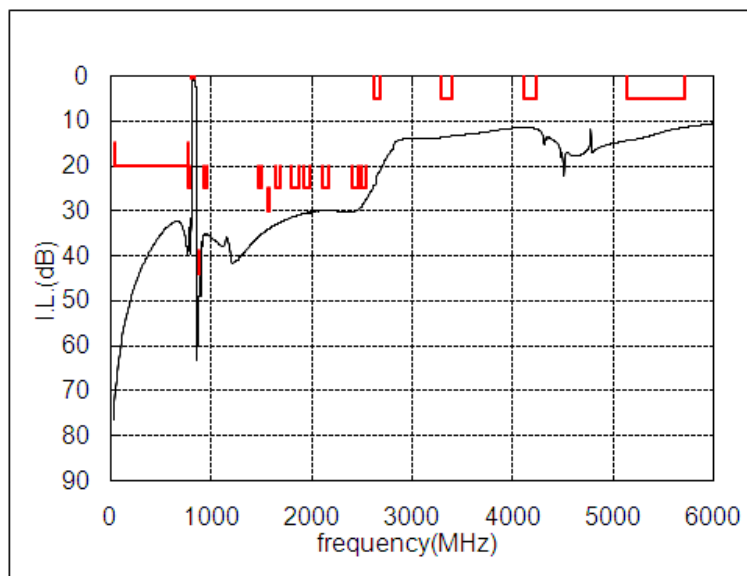
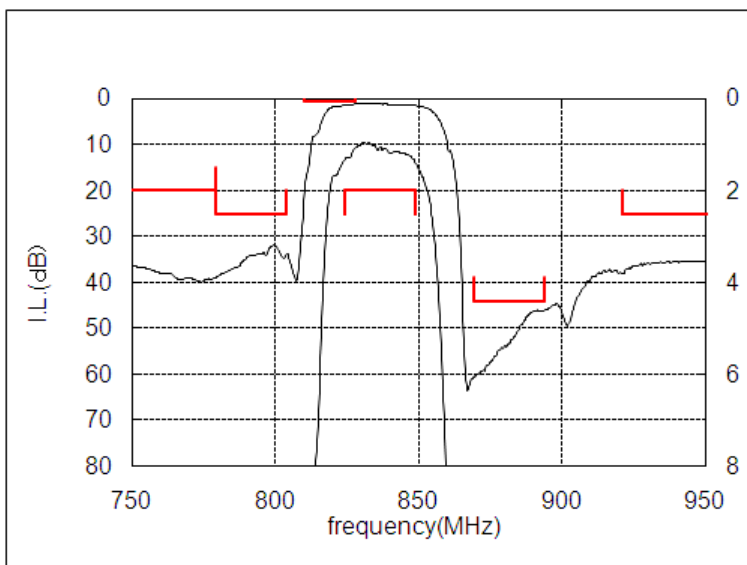
Target Specification

Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency(fc)	836.5MHz		
Insertion Loss (824 to 849MHz)	1.9dB max.	1.6dB max.	1.4 dB
Absolute Attenuation			
1) 0.1 to 779 MHz	20 dB min.	20 dB min.	32 dB
2) 779 to 804 MHz	25 dB min.	25 dB min.	32 dB
3) 810 to 828 MHz	0.5 dB min.	0.5 dB min.	1 dB
4) 869 to 894 MHz	44 dB min.	44 dB min.	45 dB
5) 921 to 960 MHz	25 dB min.	25 dB min.	35 dB
6) 1475.9 to 1500.9 MHz	25 dB min.	25 dB min.	35 dB
7) 1570 to 1580 MHz	29 dB min.	29 dB min.	34 dB
8) 1648 to 1698 MHz	25 dB min.	25 dB min.	33 dB
9) 1805 to 1880 MHz	25 dB min.	25 dB min.	31 dB
10) 1930 to 1990 MHz	25 dB min.	25 dB min.	30 dB
11) 2110 to 2170 MHz	25 dB min.	25 dB min.	30 dB
12) 2400 to 2497 MHz	25 dB min.	25 dB min.	29 dB
13) 2472 to 2547 MHz	25 dB min.	25 dB min.	28 dB
14) 2620 to 2690 MHz	5 dB min.	5 dB min.	21 dB
15) 3296 to 3396 MHz	5 dB min.	5 dB min.	14 dB
16) 4120 to 4245 MHz	5 dB min.	5 dB min.	12 dB
17) 5150 to 5725 MHz	5 dB min.	5 dB min.	12 dB
Ripple Deviation (824 to 849MHz)	1.0 dB max.	1.0 dB max.	0.5 dB
Ripple Deviation any 5.0MHz (824 to 849MHz)	1.0 dB max.	1.0 dB max.	0.3 dB
VSWR (824 to 849MHz)	2.0 max.	2.0 max.	1.6
ANT Port Matching Impedance(nominal)	50Ω//7.3nH		
Tx Port Matching Impedance(nominal)	50Ω		
Rx Port Matching Impedance(nominal)	100Ω		
Input Signal Level	1.0W,50000 hours(55°C) WCDMA modulation		

SAW DPX FOR UMTS BAND5

Murata part number :SAYFP836MCB0F00 [Tx→ANT]

Frequency Performance



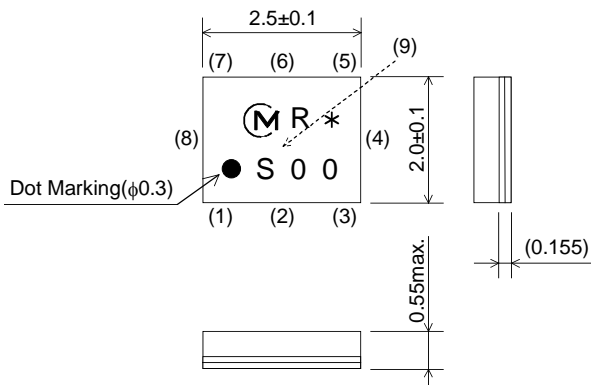
SAW DPX FOR UMTS BAND5

Murata part number :SAYFP836MCB0F00 [ANT→Rx]

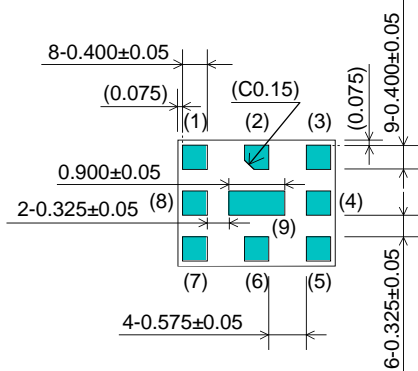
Package Dimensions

Target Specification

Top View



Bottom View



Marking
: Laser Printing

(1) : Tx
(3)(4) : Rx
(6) : Ant
Others : Ground

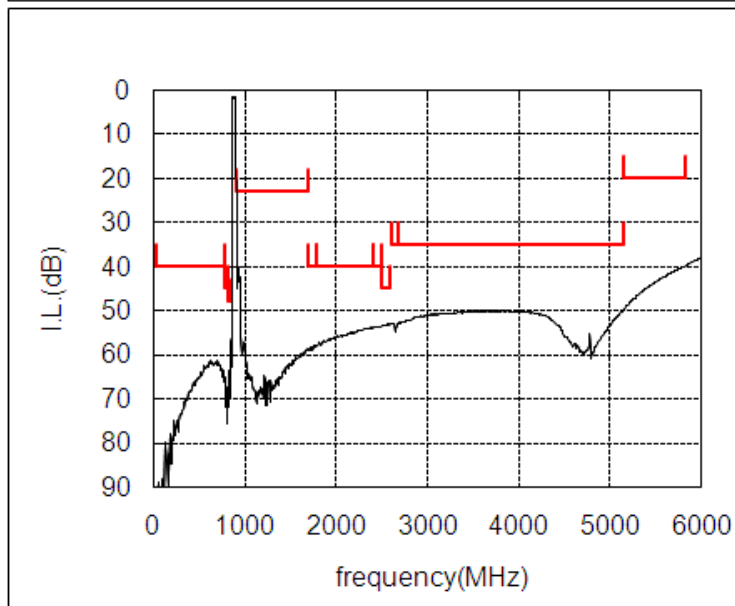
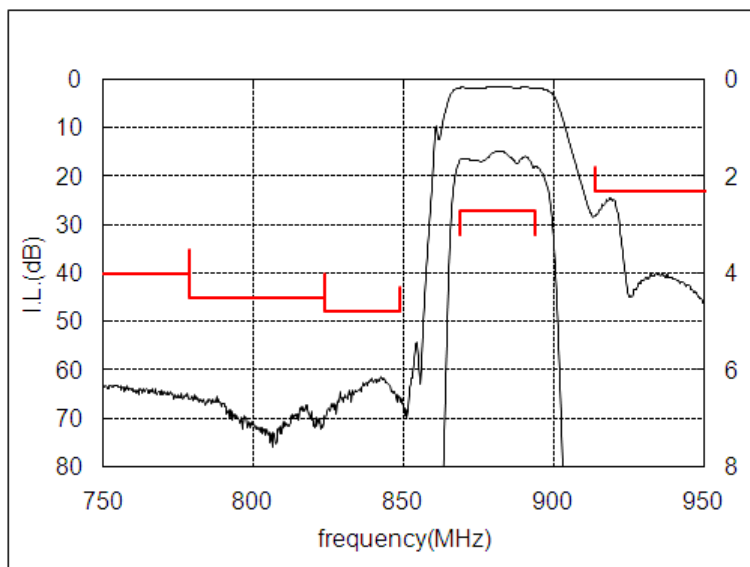
Unit : mm

Item	Specification		
	-30 to 85°C	25±2°C	typ.
Nominal Center Frequency(fc)	881.5MHz		
Insertion Loss (869 to 894MHz)	2.8dB max.	2.3dB max.	1.9 dB
Absolute Attenuation			
1) 0.1 to 779 MHz	40 dB min.	40 dB min.	62 dB
2) 779 to 824 MHz	45 dB min.	45 dB min.	68 dB
3) 824 to 849 MHz	48 dB min.	48 dB min.	63 dB
4) 914 to 1693 MHz	23 dB min.	23 dB min.	24 dB
5) 1693 to 1788 MHz	40 dB min.	40 dB min.	57 dB
6) 1788 to 2400 MHz	40 dB min.	40 dB min.	54 dB
7) 2400 to 2500 MHz	40 dB min.	40 dB min.	53 dB
8) 2500 to 2592 MHz	45 dB min.	45 dB min.	53 dB
9) 2607 to 2682 MHz	35 dB min.	35 dB min.	53 dB
10) 2682 to 5150 MHz	35 dB min.	35 dB min.	47 dB
11) 5150 to 5825 MHz	20 dB min.	20 dB min.	44 dB
Ripple Deviation (869 to 894MHz)	1.2 dB max.	1.2 dB max.	0.3 dB
Ripple Deviation any 5MHz (869 to 894MHz)	1.6 dB max.	1.6 dB max.	0.3 dB
Amplitude Balance (869 to 894Hz)	±1.0dB max.	±1.0dB max.	0.4
Phase Balance (869 to 894Hz)	180±10deg. max.	180±10deg. max.	180±3deg.
VSWR (869 to 894MHz)	2.0 max.	2.0 max.	1.6
ANT Port Matching Impedance(nominal)	50Ω//7.3nH		
Tx Port Matching Impedance(nominal)	50Ω		
Rx Port Matching Impedance(nominal)	100Ω		

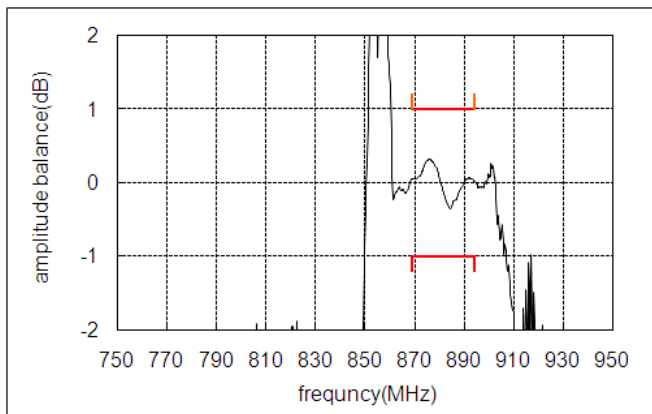
SAW DPX FOR UMTS BAND5

Murata part number :SAYFP836MCB0F00 [ANT→Rx]

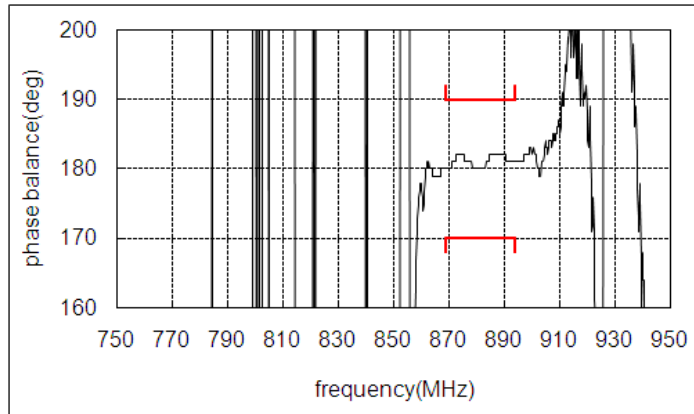
Frequency Performance



Amplitude balance



Phase balance



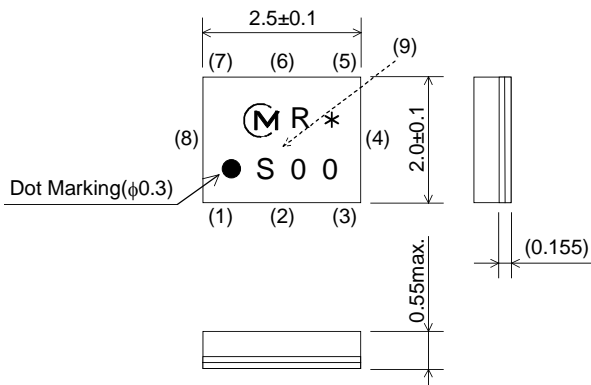
SAW DPX FOR UMTS BAND5

Murata part number :SAYFP836MCB0F00 [Tx→Rx]

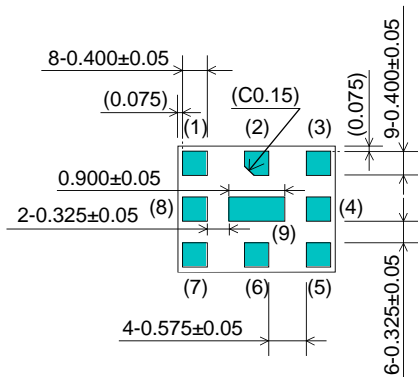
■ Package Dimensions

■ Target Specification

Top View



Bottom View



Marking
: Laser Printing

(1) : Tx
(3)(4) : Rx
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Others : Ground

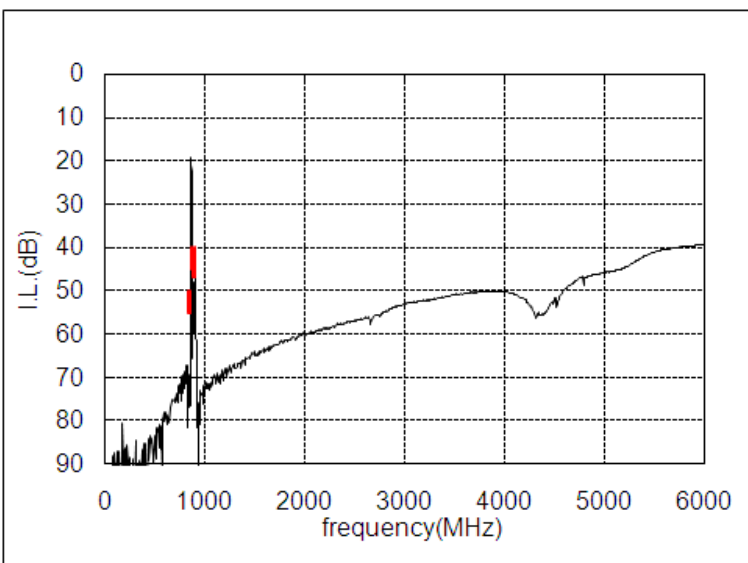
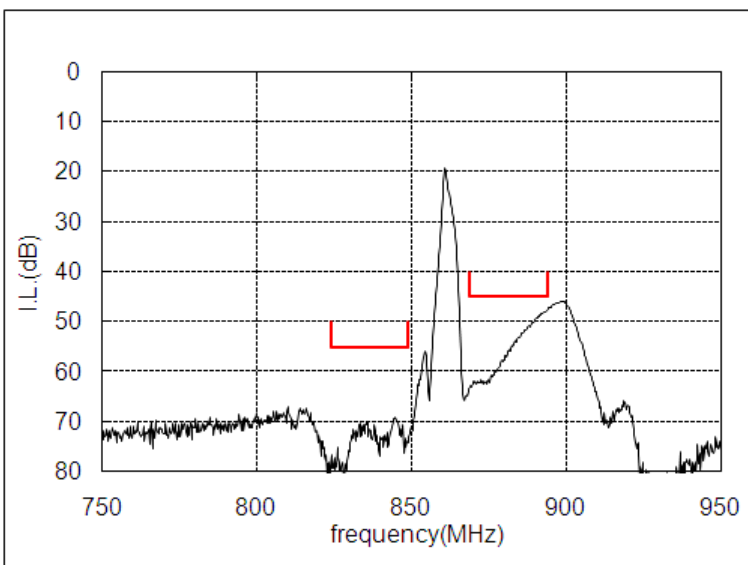
Unit : mm

Item	Specification		
	-30 to 85°C	25±2°C	typ.
Isolation			
1) 824 to 849 MHz	55 dB min.	55 dB min.	72 dB
2) 869 to 894 MHz	45 dB min.	45 dB min.	47 dB
3) 1648 to 1698 MHz	40 dB min.	40 dB min.	63 dB

SAW DPX FOR UMTS BAND5

Murata part number :SAYFP836MCB0F00 [Tx→Rx]

■ Frequency Performance

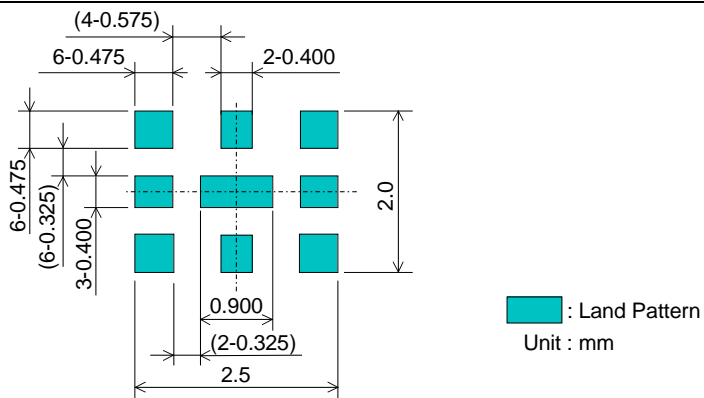


SAW DPX FOR UMTS BAND5

Murata part number :SAYFP836MCB0F00

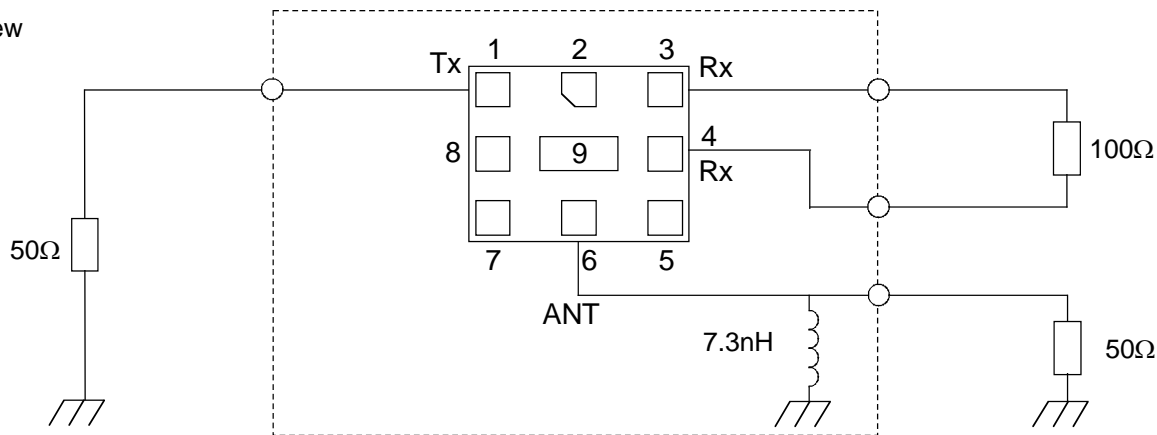
Recommended Land Pattern

Top View



Test Circuit

Bottom View



SAW DPX FOR UMTS BAND5

Murata part number :SAYFP836MCB0F00

■ RoHS Compliance

This component is compliant with RoHS directive.

This component was always RoHS compliant from the first date of manufacture.

• Caution - Limitation of Applications

This product is intended for the following applications only; however, please do not use this product in these applications where defects might directly cause damage to a third party's life, body or property.

- a. Mobile Telephone
- b. Cordless phone (except for Automotive use)
- c. PC (Including Notebook PC, Netbook PC, Tablet)
- d. Game
- e. Camera (except for Business/security use)
- f. Set Top Box
- g. Electronic dictionary
- h. Digital audio equipment

• This catalog is for reference only and not an official product specification document, therefore, please review and approve our official product specification before ordering this product.