

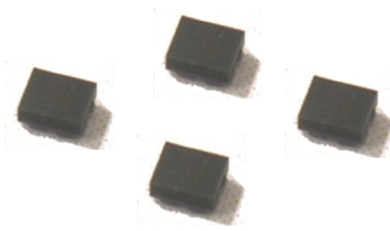
# Datasheet of SAW Device

SAW Duplexer  
for Band3 / Unbalanced / LR /1814

Murata PN: SAYEY1G74BC0B0A

## ■ Feature

- LTE-A
- High Power Durability



Note : Murata SAW Component is applicable for Cellular /Cordless phone (Terminal) relevant market only.  
Please also read caution at the end of this document.

SAYEY1G74BC0B0A ( Band3 / Unbalanced / LR / 1814 )

### General Information

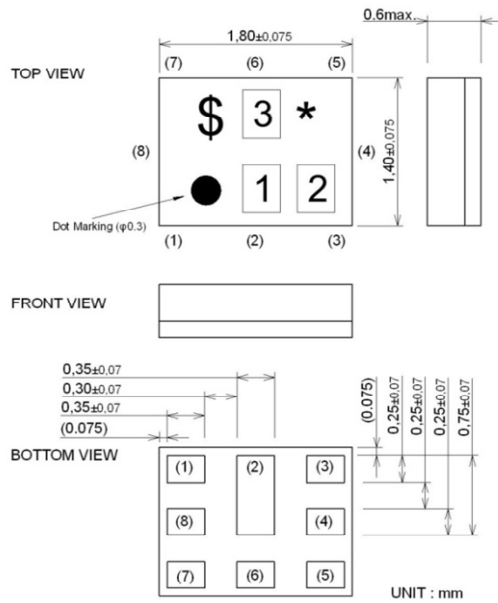
- Operating temperature	: -20 to +85 deg.C
- Storage temperature	: -40 to +85 deg.C
- Input Power	: +29.5 dBm 5000 h +50 deg.C +30.0 dBm 3000 h +50 deg.C
- D.C. Volatage between the terminals	: 3V (25+/-2 deg.C)
- Minimum Resistance between the terminals	: 10M ohm
- RoHS compliance	: Yes
- ESD (ElectroStatic Discharge) sensitive device	

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Package Dimensions & Recommended Land Pattern

unit: mm

Dimensions



Marking : Laser Printing

\* : Month code(Refer to the table A)

\$ : Date code(Refer to the table B)

1 : 6

2 : W

3 : A

Terminal Number

(6) : Ant

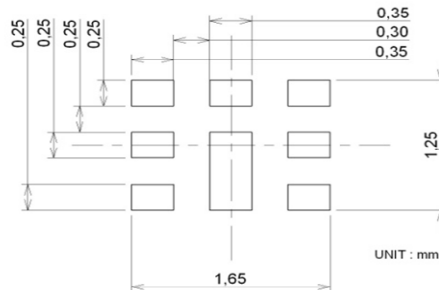
(3) : TX

(1) : RX

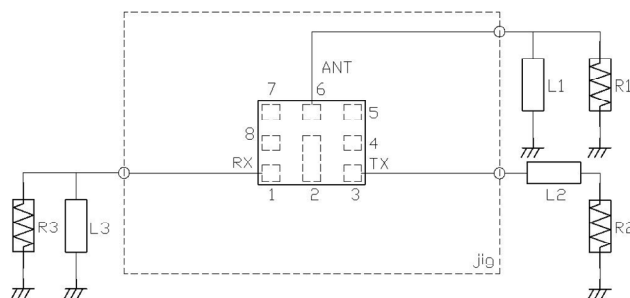
Others : GND

Notice) Please refer to Measurement Circuit for Port information in detail.

Land Pattern



Measurement Circuit (Top Thru View)



R1 : 50 ohm	L1 :3.9nH(Ideal inductor)
	:4.7nH(LQP03TN4N7)
	<Reference>
R2 : 50 ohm	L2 :2nH(Ideal inductor)
R3 : 50 ohm	L3 :8nH(Ideal inductor)

**SAYEY1G74BC0B0A ( Band3 / Unbalanced / LR / 1814 )**

**Electrical Characteristic < TX→ANT. >**

TX → ANT.		Characteristics (-20 to +85 deg.C)			Unit	Note
		min.	typ.*	max.		
		Center Frequency		1747.5		
Insertion Loss	1710. to 1785. MHz		2.0	2.5	dB	
	1710. to 1785. MHz		2.0	2.4	dB	+23 to +27deg.C
	1712.5 to 1782.5 MHz		1.8	2.4	dB <sub>INT</sub>	Any 4.5MHz
	1712.5 to 1782.5 MHz		1.8	2.3	dB <sub>INT</sub>	+23 to +27deg.C, Any 4.5MHz
Ripple Deviation	1710. to 1785. MHz		0.4	1.1	dB	Over any 5MHz in-band
VSWR	1710. to 1785. MHz		1.7	2.2		ANT.
	1710. to 1785. MHz		1.6	2.1		TX
Absolute Attenuation	10. to 1565.42 MHz	28	34		dB	
	703. to 748. MHz	30	40		dB	B28 Tx CA
	716. to 756. MHz	35	40		dB	B28 Rx Band
	814. to 849. MHz	33	38		dB	B26 Tx CA
	832. to 862. MHz	33	38		dB	B26 Tx CA
	814. to 849. MHz	33	38		dB	B20 Tx CA
	880. to 915. MHz	33	37		dB	B8 Tx CA
	925. to 960. MHz	32	37		dB	
	1226. to 1250. MHz	30	34		dB	
	1496. to 1511. MHz	33	38		dB	B21 Rx Band
	1559. to 1563. MHz	36	42		dB	Compass
	1565.42 to 1573.37 MHz	37	43		dB	Wideband GPS, lower side-lobe
	1573.37 to 1577.47 MHz	38	44		dB	Regular GPS, main-lobe
	1577.47 to 1585.42 MHz	38	44		dB	Wideband GPS, upper side-lobe
	1597.55 to 1605.89 MHz	42	45		dB	GLONASS
	1605.89 to 1680. MHz	5.0	14.0		dB	
	1805. to 1880. MHz	42	48		dB	Rx
	1920. to 1980. MHz	20	40		dB	
	2110. to 2170. MHz	24	38		dB	
	2400. to 2500. MHz	28	34		dB	ISM2.4GHz
	2620. to 2690. MHz	25	30		dB	
	3420. to 3570. MHz	20	24		dB	2fo
	4900. to 5850. MHz	16	25		dB	ISM5GHz
	5100. to 5385. MHz	18	27		dB	
	5130. to 5355. MHz	18	27		dB	3fo
	6840. to 7140. MHz	12	22		dB	
	8550. to 8925. MHz	6.0	16.0		dB	
10260. to 10710. MHz	10	20		dB		
11970. to 12495. MHz	6.0	16.0		dB		

\* Typical value at 25±2deg.C

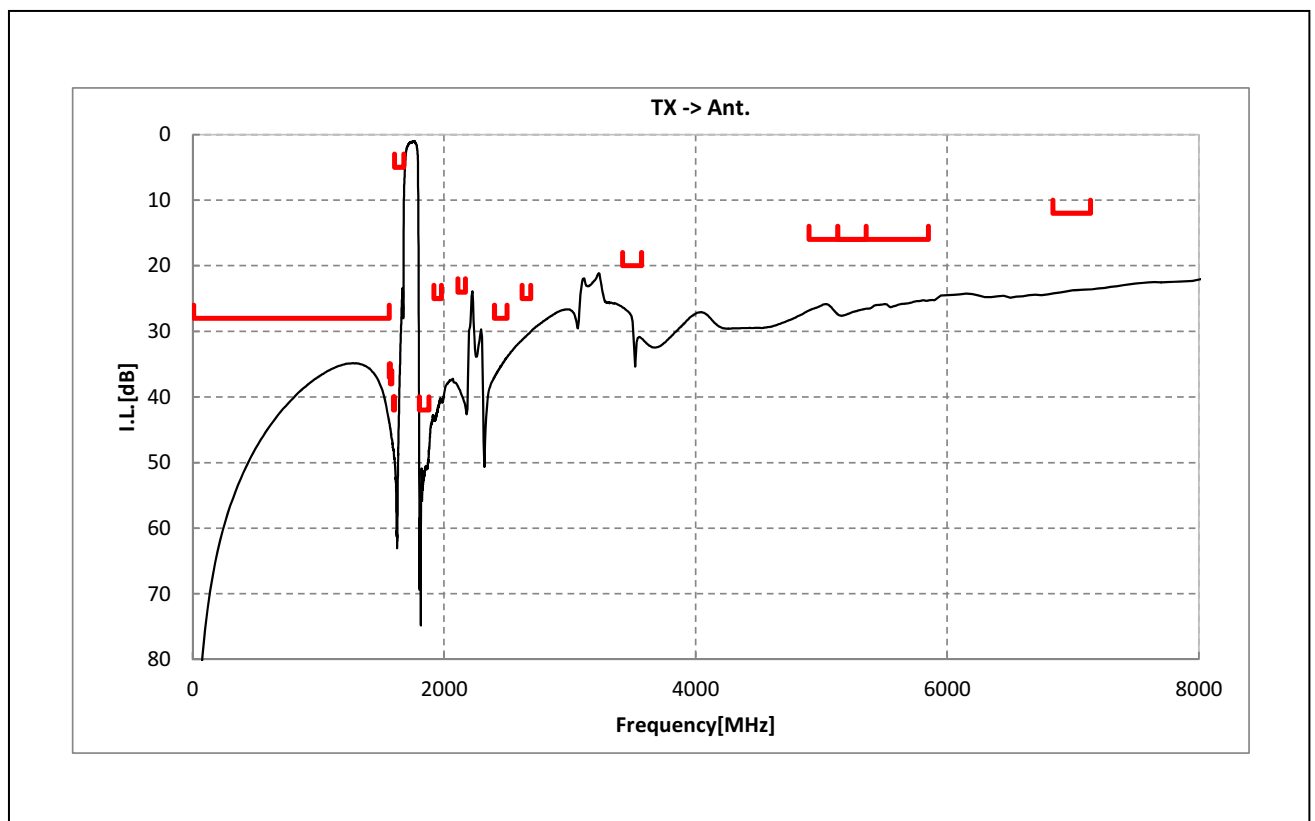
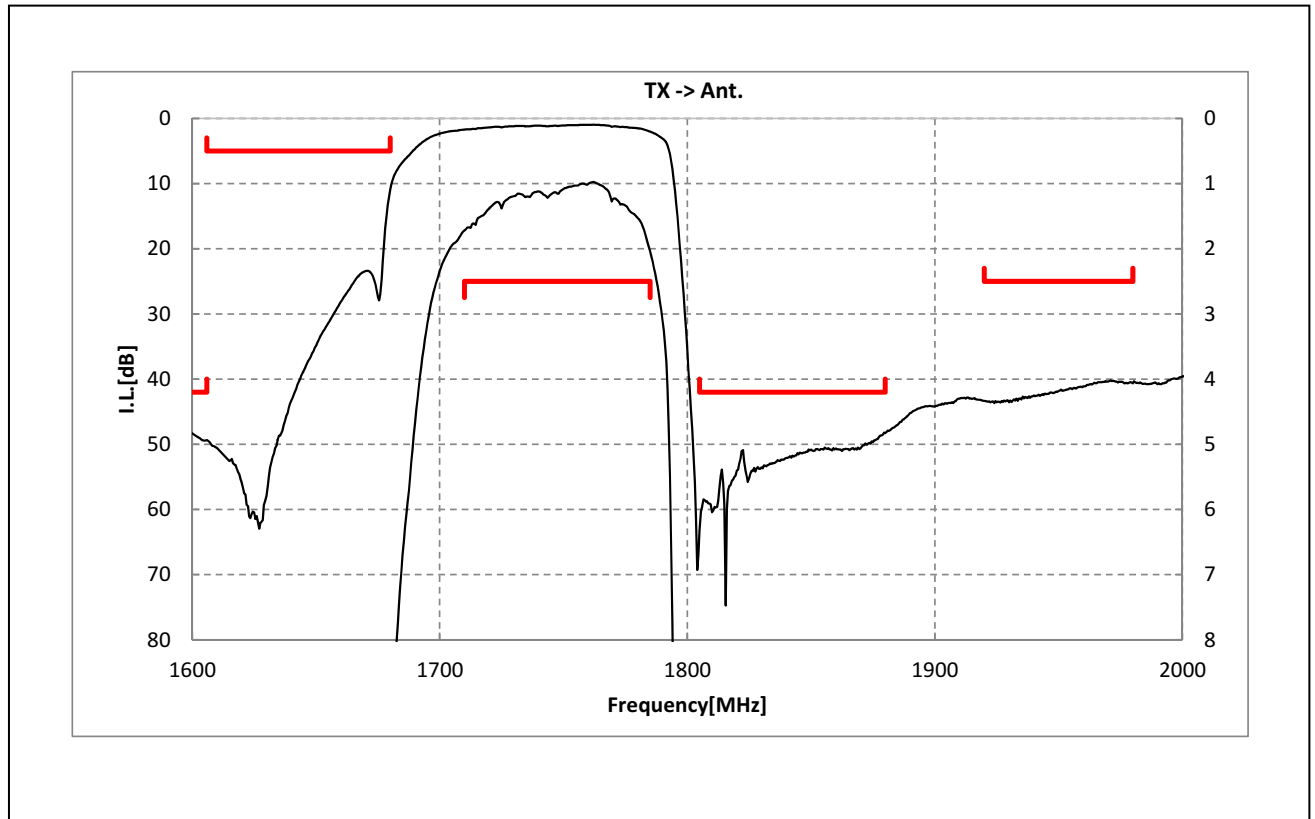




SAYEY1G74BC0B0A ( Band3 / Unbalanced / LR / 1814 )

Electrical Characteristic

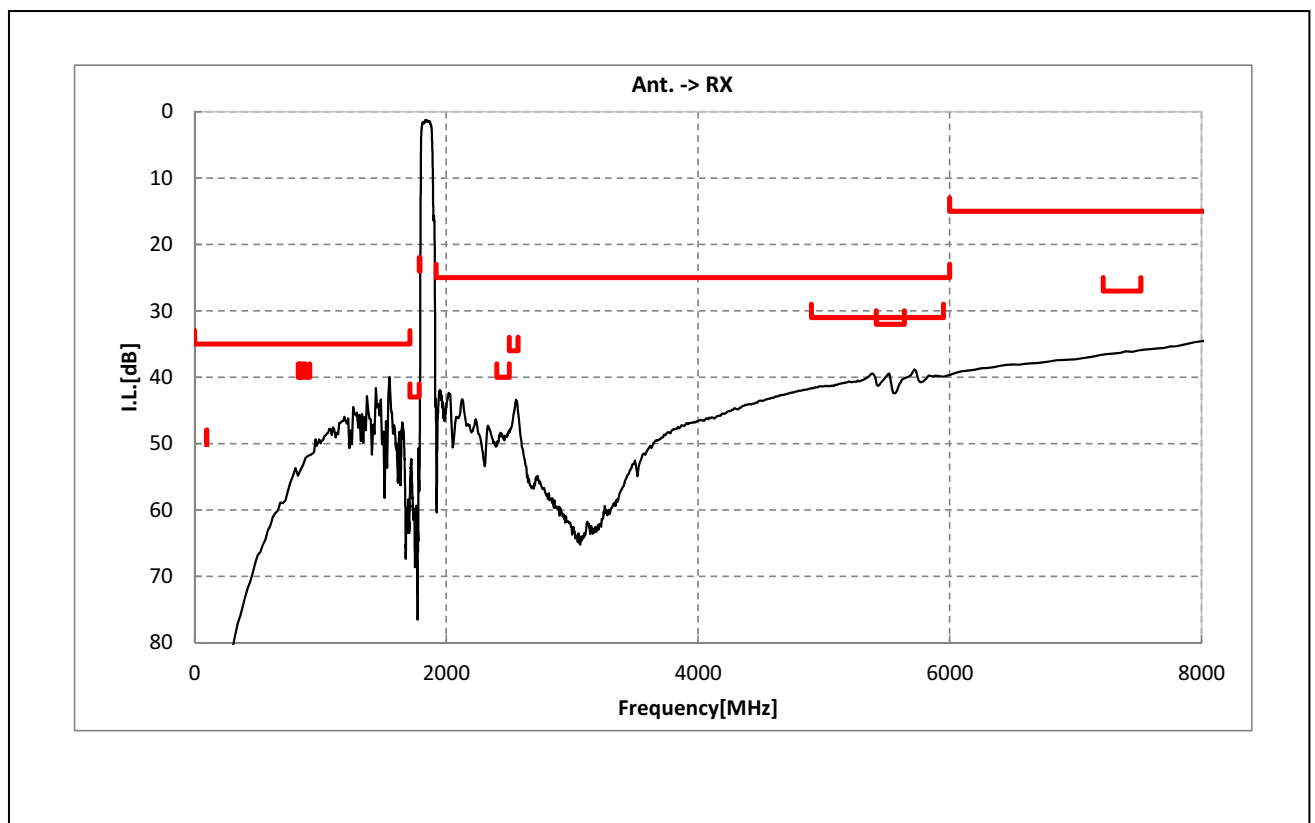
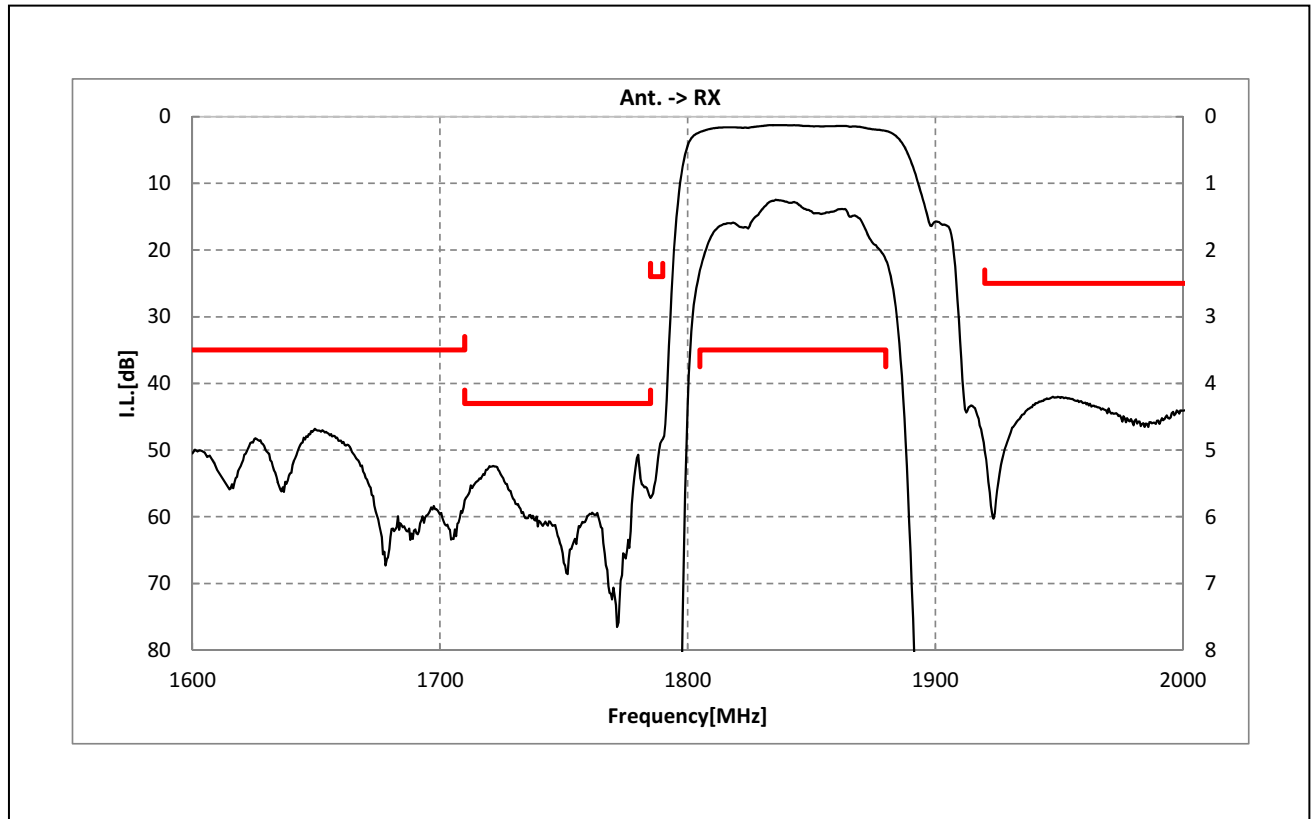
< TX→ANT. >



SAYEY1G74BC0B0A ( Band3 / Unbalanced / LR / 1814 )

Electrical Characteristic

< ANT. → RX >

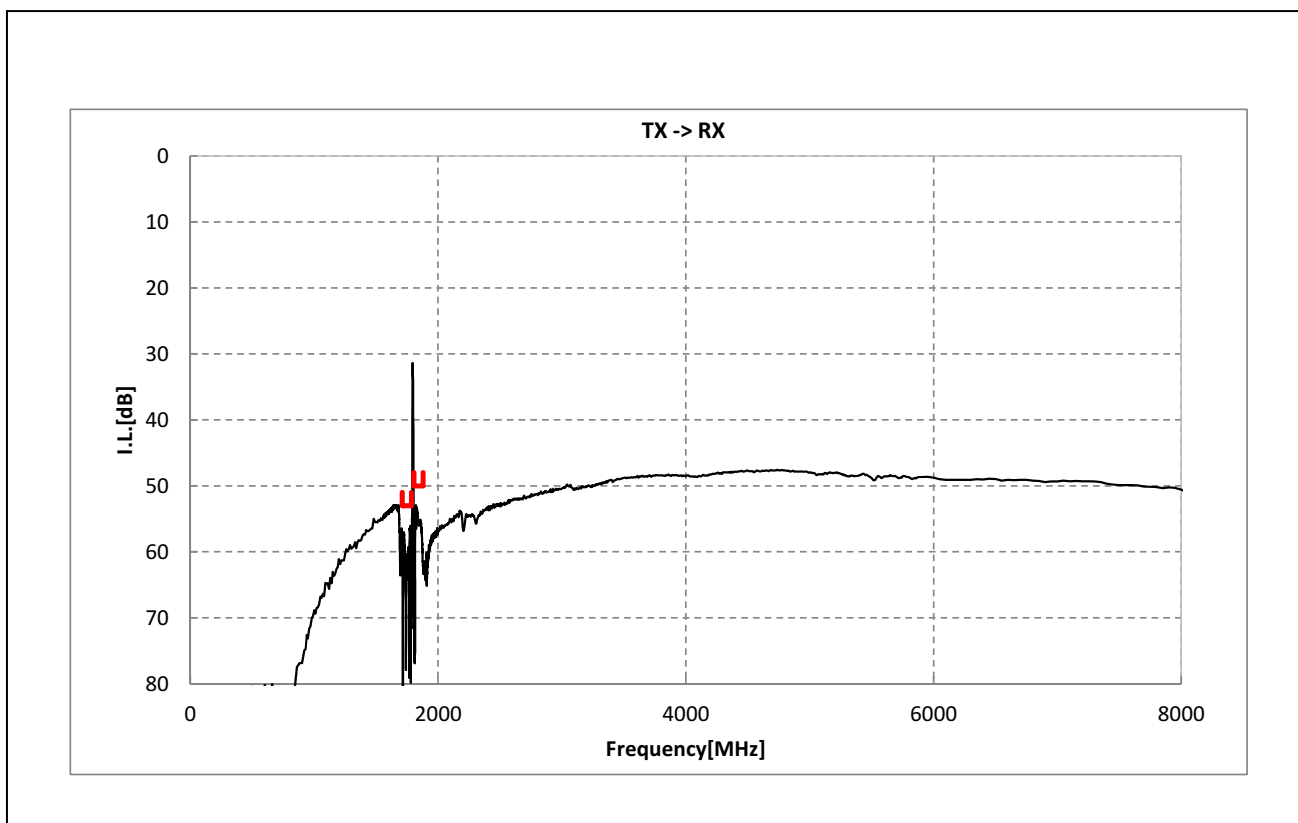
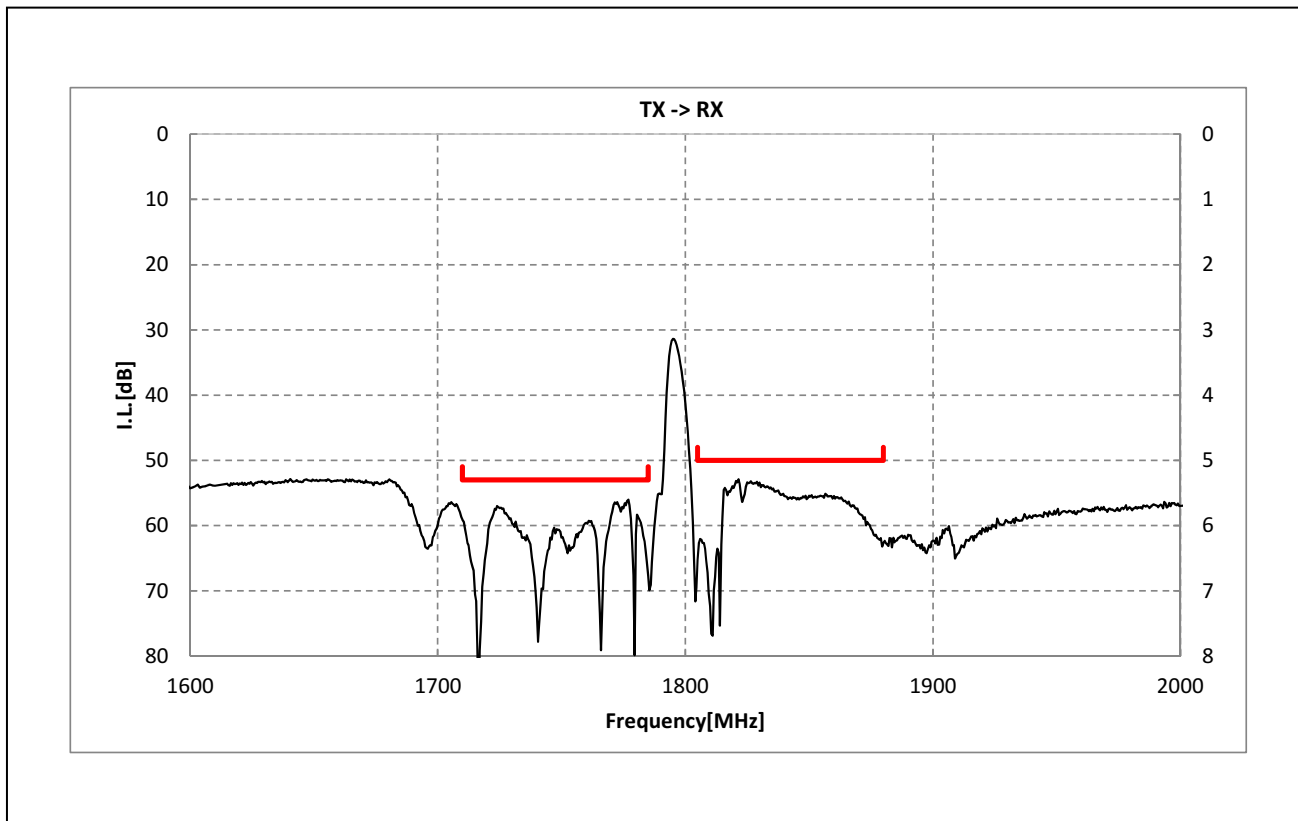




SAYEY1G74BC0B0A ( Band3 / Unbalanced / LR / 1814 )

Electrical Characteristic

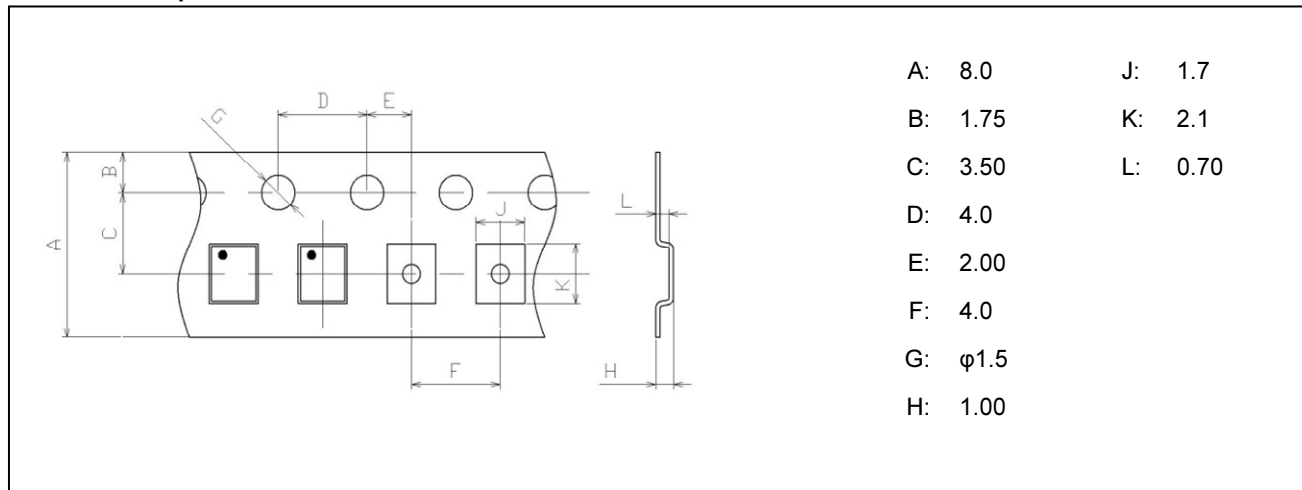
< TX→RX. >



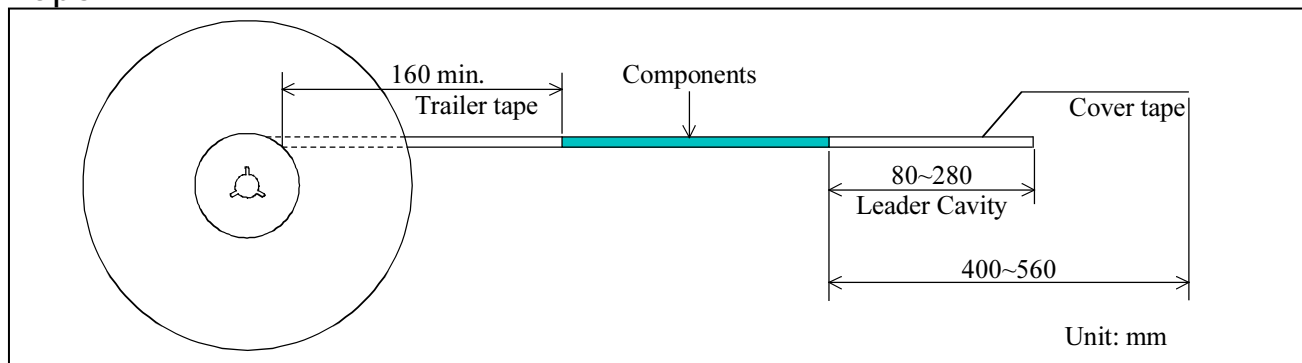
**SAYEY1G74BC0B0A ( Band3 / Unbalanced / LR / 1814 )**

**Dimensions of Tape & Reel** unit: mm

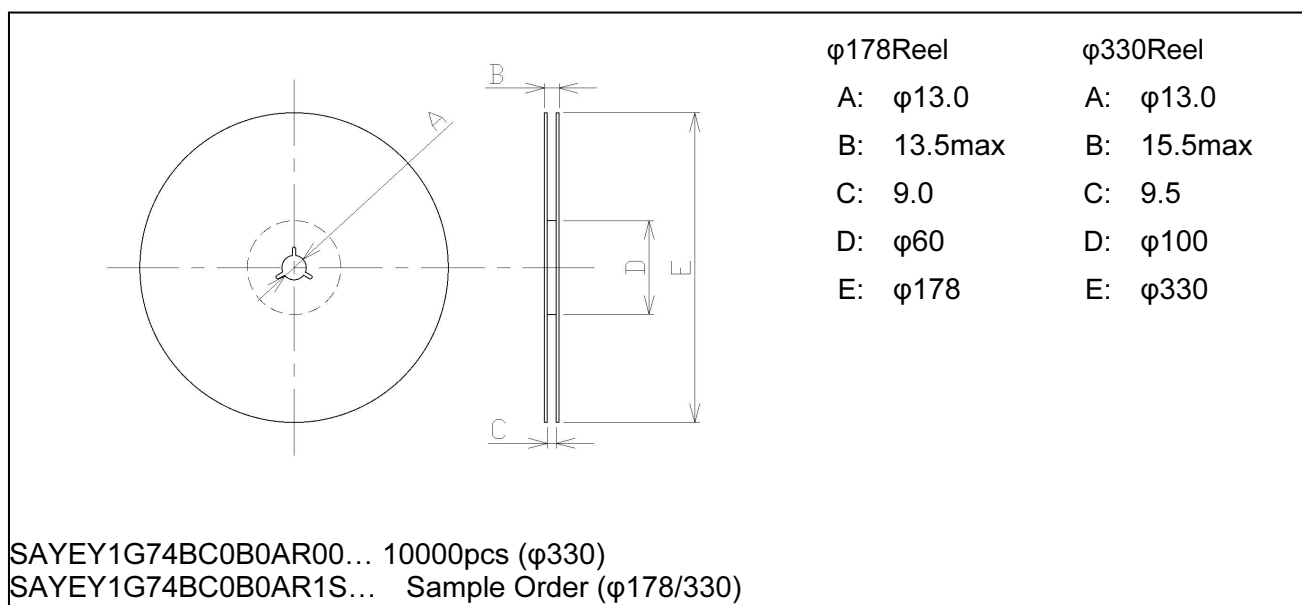
**Carrier Tape**



**Tape**



**Reel**



## Marking Code

Table A: Month Code

2013 2017 2021	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	A	B	C	D	E	F	G	H	J	K	L	M
2014 2018 2022	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015 2019 2023	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	a	b	c̄	d	e	f	g	h	j	k	l	m
2016 2020 2024	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
	n	p	q	r	s	t	u	v	w	x	y	z

Table B: Date Code

date	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	
code	A	B	C	D	E	F	G	H	J	K	
date	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	
code	L	M	N	P	Q	R	S	T	U	V	
date	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th	31st
code	W	X	Y	Z	a	b	c̄	d	e	f	g

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Please make sure that your product has been evaluated and confirmed from the aspect of the fitness for the specifications of our product when our product is mounted to your product. All the items and parameters in this product specification/datasheet/catalog have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment specified in this specification. You are requested not to use our product deviating from the condition and the environment specified in this specification.

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- Aerospace equipment
- Undersea equipment.
- Power plant control equipment - Medical equipment.
- Transportation equipment (vehicles, trains, ships, elevator, etc.).
- Traffic signal equipment.
- Disaster prevention / crime prevention equipment.
- Burning / explosion control equipment
- Application of similar complexity and/ or reliability requirements to the applications listed in the above.

We expressly prohibit you from analyzing, breaking, Reverse-Engineering, remodeling altering, and reproducing our product. Our product cannot be used for the product which is prohibited from being manufactured, used, and sold by the regulations and laws in the world.

Please do not use the product in molding condition.

This product is ESD (ElectroStatic Discharge) sensitive device.

When you install or measure this, you should be careful not to add antistatic electricity or high voltage. Please be advised that you had better check anti surge voltage.

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The product shall not be used in any other application/model than that of claimed to Murata.

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