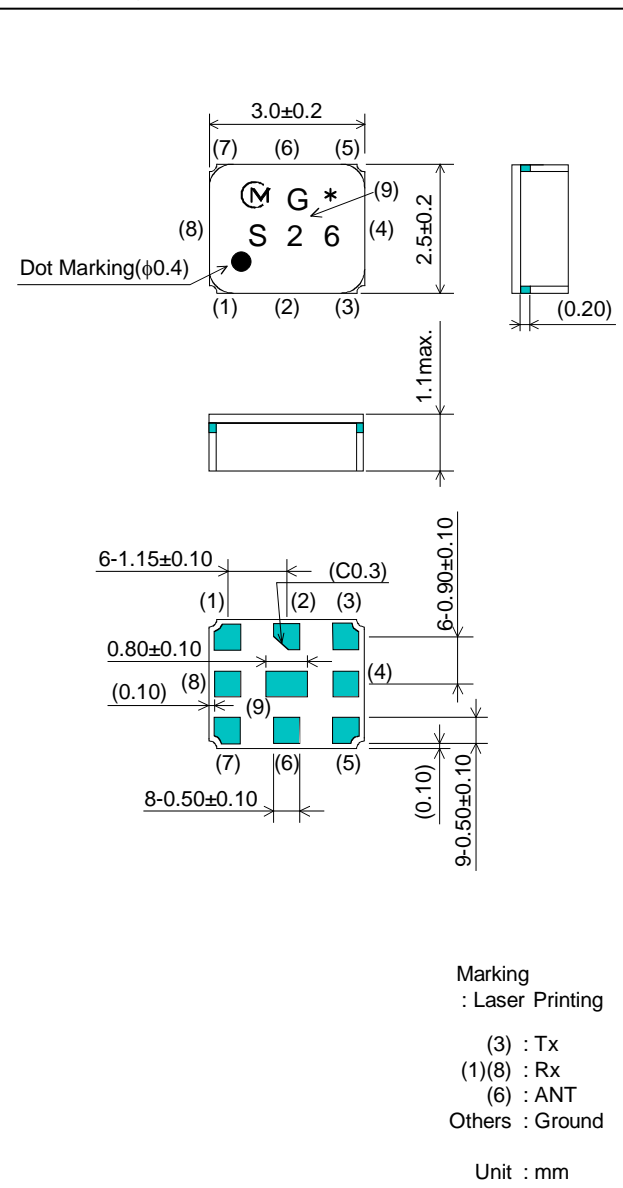


# SAW DPX FOR Telematics

Murata part number :SAYZY1G95CA0B10 [Tx → ANT]

## Package Dimensions



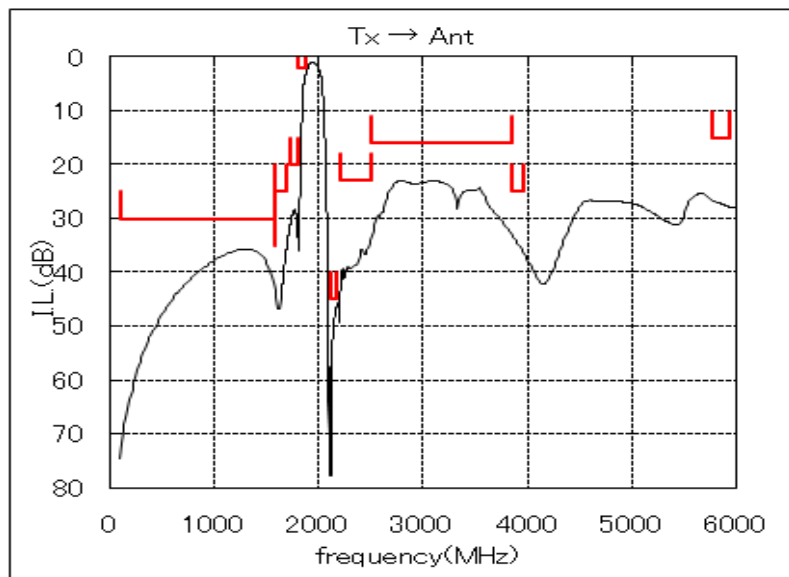
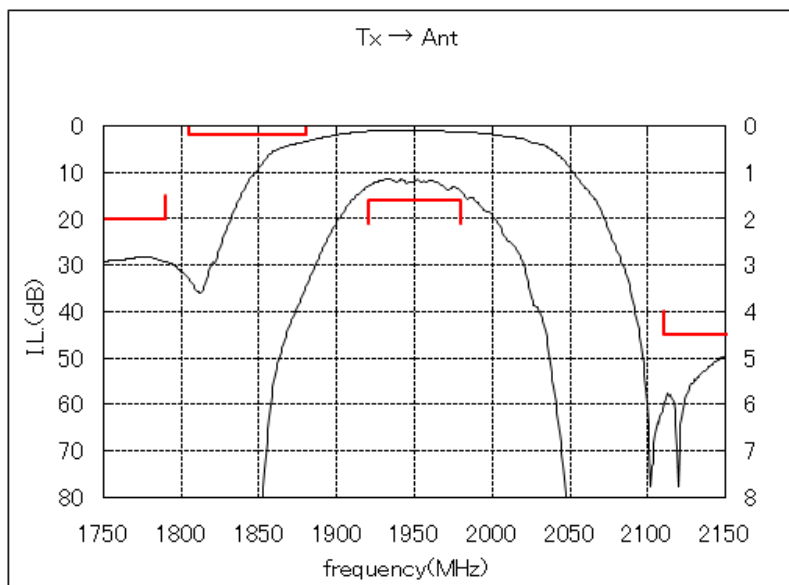
## Specification

Item	Specification	
	-40 to 85°C	typ.
Nominal Center Frequency( $f_c$ )	1950MHz	
Insertion Loss (1920 to 1980MHz)	1.65 dB max.	1.45 dB
Absolute Attenuation		
1) 0.1 to 1570 MHz	30 dB min.	35 dB
2) 1570 to 1580 MHz	35 dB min.	42 dB
3) 1580 to 1680 MHz	25 dB min.	37 dB
4) 1730 to 1790 MHz	20 dB min.	28 dB
5) 1805 to 1880 MHz	2 dB min.	3.5 dB
6) 2110 to 2170 MHz	45 dB min.	47 dB
7) 2200 to 2500 MHz	23 dB min.	33 dB
8) 2500 to 3840 MHz	16 dB min.	22 dB
9) 3840 to 3960 MHz	25 dB min.	32 dB
10) 5760 to 5940 MHz	15 dB min.	26 dB
Ripple Deviation (1920 to 1980MHz)	1.0 dB max.	0.3 dB
Any 3.84MHz Ripple Devision (1920 to 1980MHz)	0.5 dB max.	0.1 dB
VSWR (1920 to 1980MHz)	1.8 max.	1.3
ANT Port Matching Inpedance(normal)	50Ω	
Tx Port Matching Inpedance(normal)	50Ω	
Rx Port Matching Inpedance(normal)	100Ω//10nH	
Input Signal Level	0.8W, 50000 hours (55°C)	

# SAW DPX FOR Telematics

Murata part number :SAYZY1G95CA0B10 [Tx→ANT]

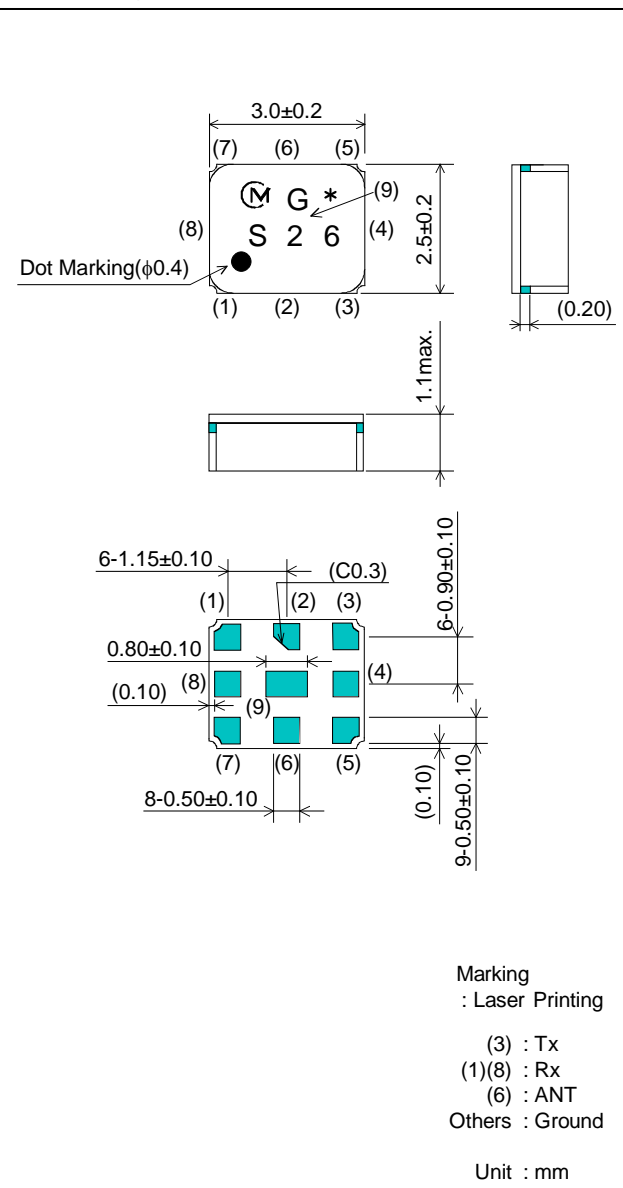
■ Frequency Performance



# SAW DPX FOR Telematics

Murata part number :SAYZY1G95CA0B10 [ANT→Rx]

## Package Dimensions



## Specification

Item	Specification	
	-40 to 85°C	typ.
Nominal Center Frequency(fc)	2140MHz	
Insertion Loss (2110 to 2170MHz)	2.15 dB max.	1.6 dB
Absolute Attenuation		
1) 0.1 to 1085 MHz	50 dB min.	55 dB
2) 1085 to 1730 MHz	30 dB min.	35 dB
3) 1730 to 1920 MHz	38 dB min.	45 dB
4) 1920 to 1980 MHz	50 dB min.	55 dB
5) 1980 to 2025 MHz	27 dB min.	31 dB
6) 2025 to 2050 MHz	27 dB min.	31 dB
7) 2050 to 2095 MHz	1.5 dB min.	5 dB
8) 2230 to 2400 MHz	20 dB min.	31 dB
9) 2400 to 2500 MHz	40 dB min.	45 dB
10) 2500 to 6000 MHz	35 dB min.	42 dB
11) 6000 to 12750 MHz	15 dB min.	24 dB
Ripple Deviation (2110 to 2170MHz)	1.0 dB max.	0.2 dB
Any 3.84MHz Ripple Devision (2110 to 2170MHz)	0.5 dB max.	0.1 dB
VSWR (2110 to 2170MHz)	1.8 max.	1.3
Amplitude Balance*1 (2110 to 2170MHz)	±1.3dB max.	0.6dB
Phase Balance*2 (2110 to 2170MHz)	180±13deg. max.	180+5deg.
ANT Port Matching Inpedance(normal)	50Ω	
Tx Port Matching Inpedance(normal)	50Ω	
Rx Port Matching Inpedance(normal)	100Ω//10nH	

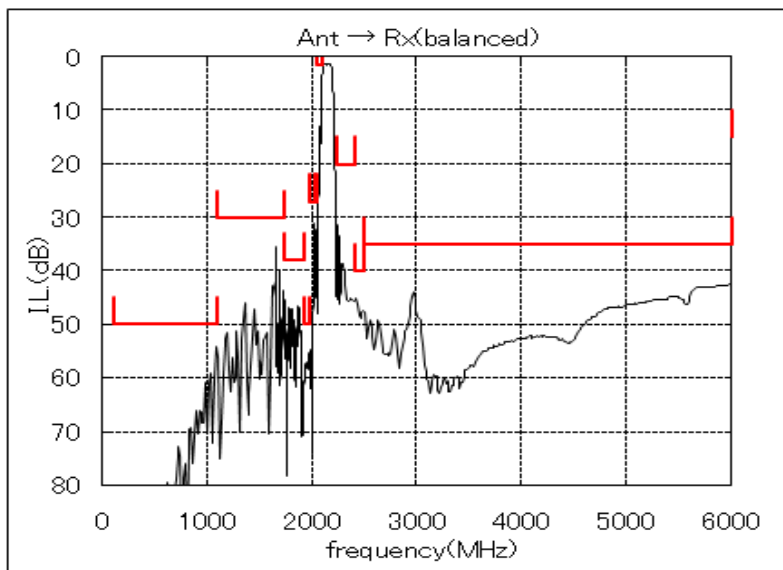
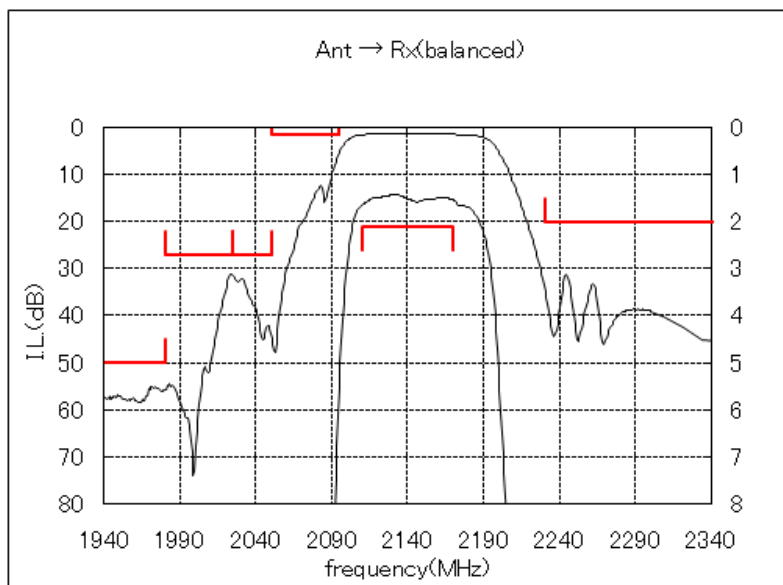
\*1 Amplitude Balance:20 log |S21| - 20 log |S31|

\*2 Phase Balance:Phase (S21) - Phase (S31)

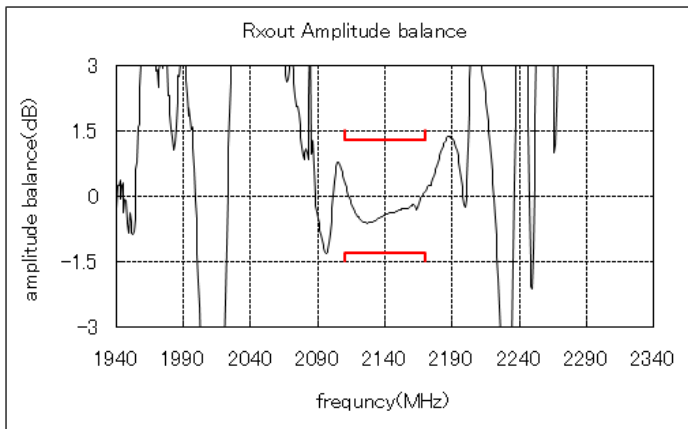
# SAW DPX FOR Telematics

Murata part number :SAYZY1G95CA0B10 [ANT → Rx]

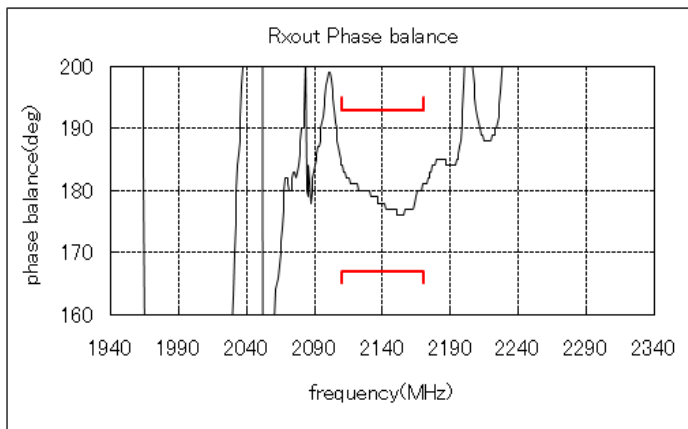
## Frequency Performance



### Amplitude balance



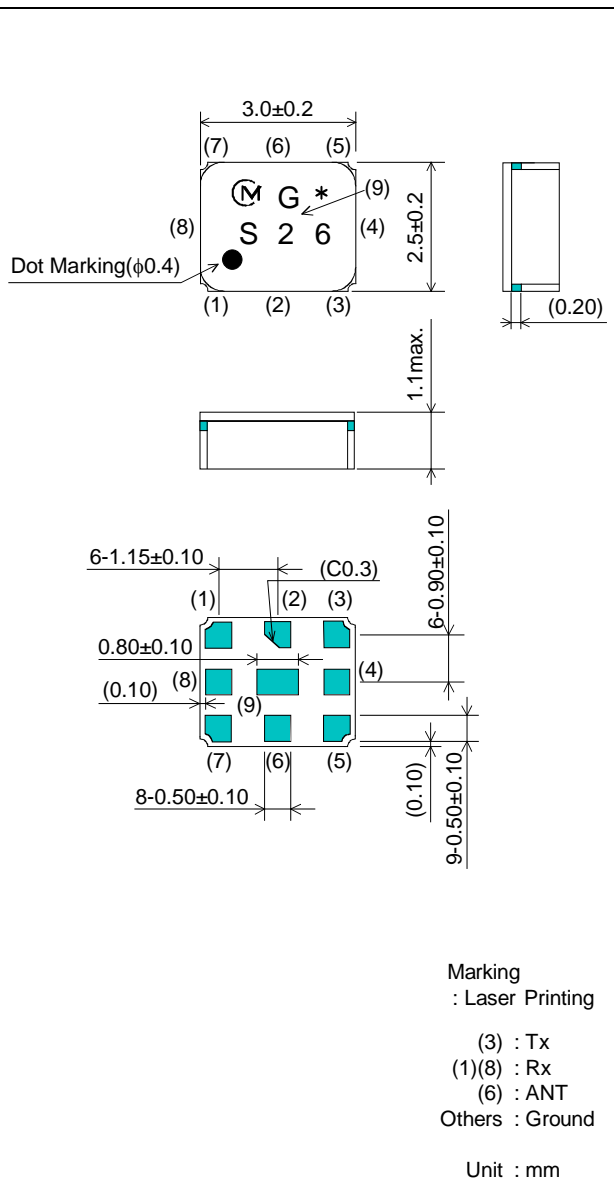
### Phase balance



# SAW DPX FOR Telematics

Murata part number : SAYZY1G95CA0B10 [Tx → Rx]

## Package Dimensions



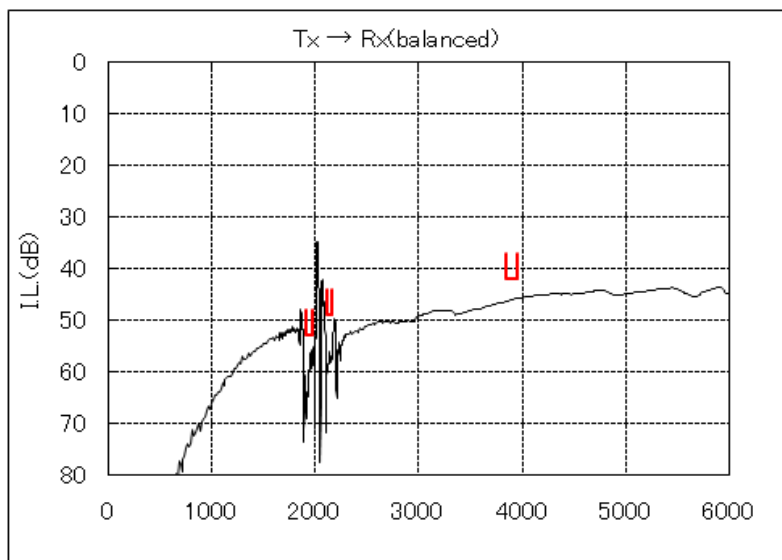
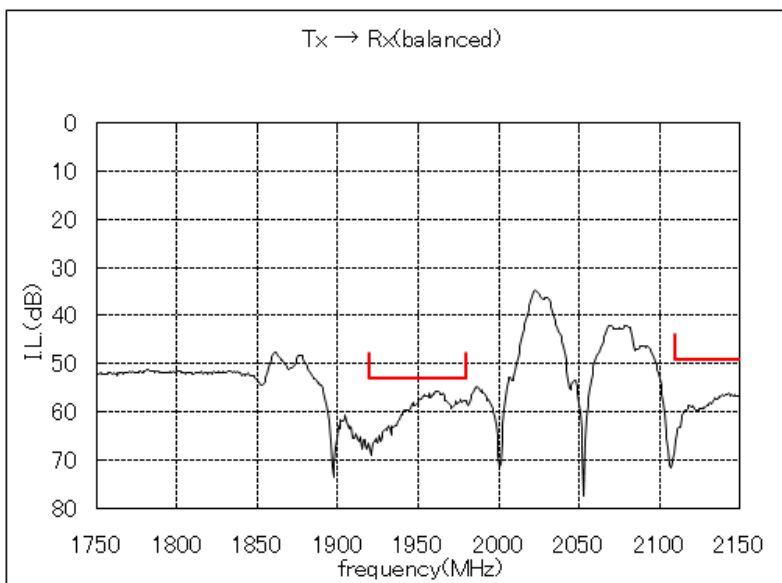
## Specification

Item	Specification	
	-40 to 85°C	typ.
Isolation		
1) 1920 to 1980 MHz	53 dB min.	57 dB
2) 2110 to 2170 MHz	48 dB min.	55 dB
3) 3840 to 3960 MHz	42 dB min.	46 dB

# SAW DPX FOR Telematics

Murata part number :SAYZY1G95CA0B10 [Tx→Rx]

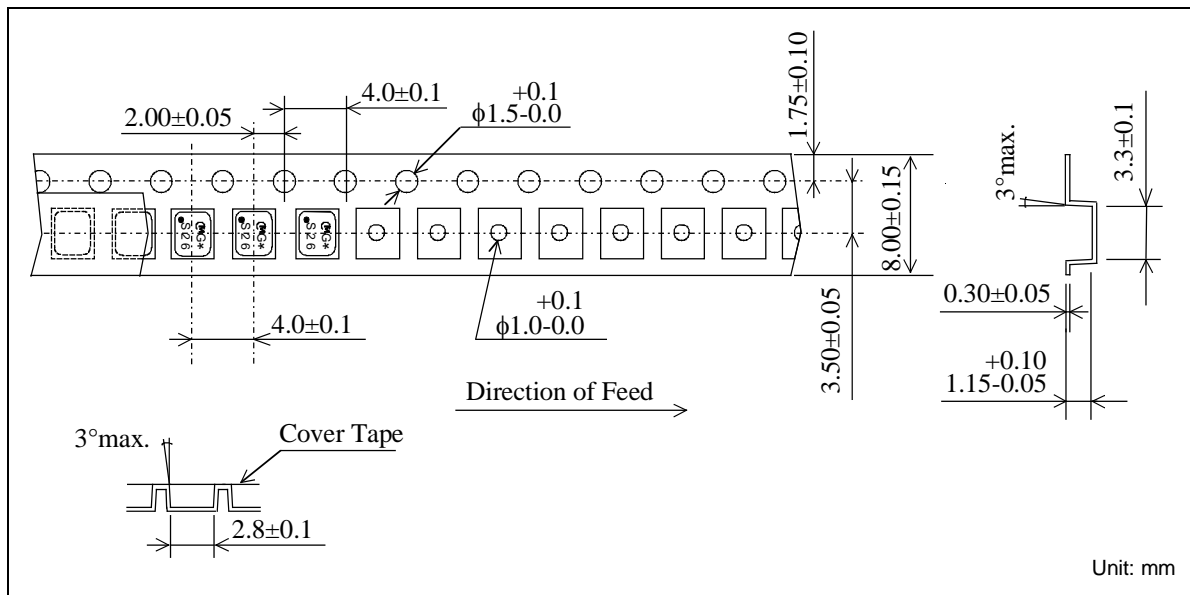
## Frequency Performance



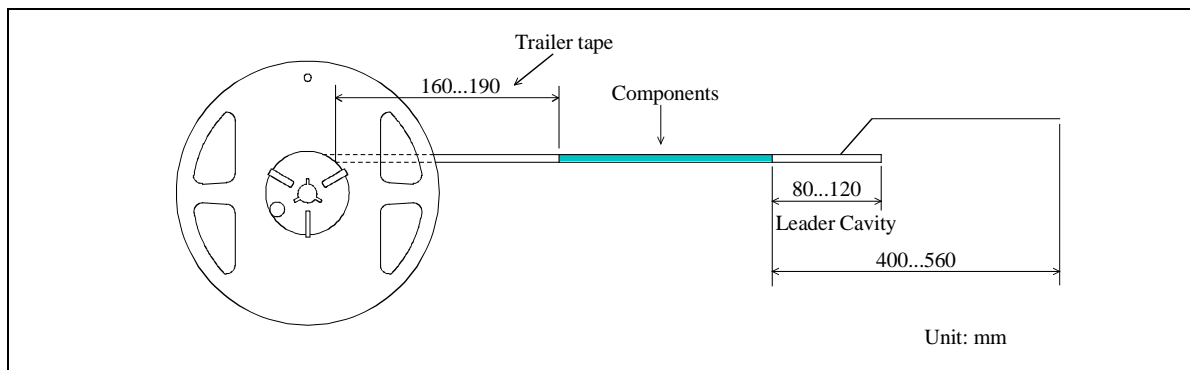
# SAW DPX FOR Telematics

Murata part number :SAYZY1G95CA0B10

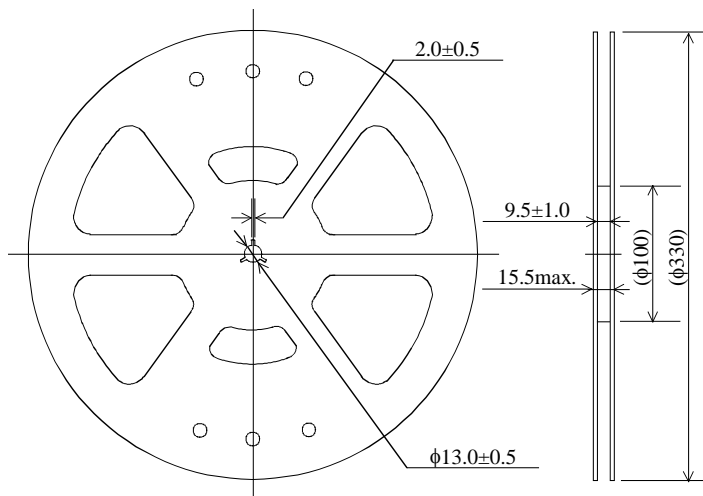
## Dimensions of Carrier Tape



## Dimensions of Tape



## Dimensions of Reel

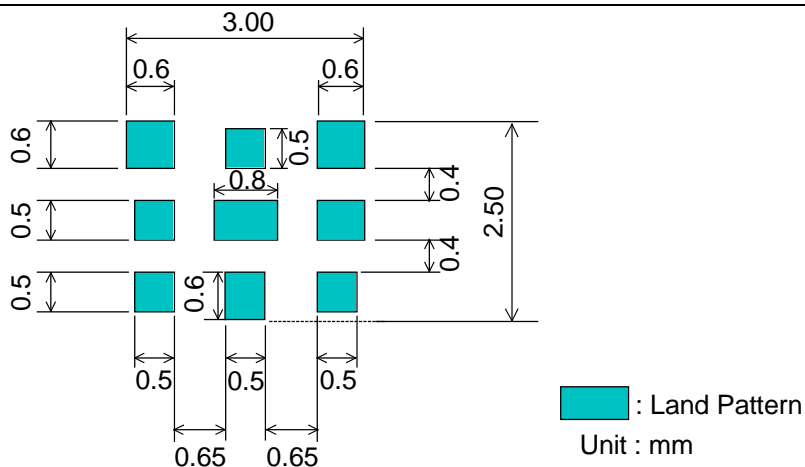


SAYZY1G95CA0B10R00 ... 10000pcs/reel  
SAYZY1G95CA0B10R05 ... 5000pcs/reel

# SAW DPX FOR Telematics

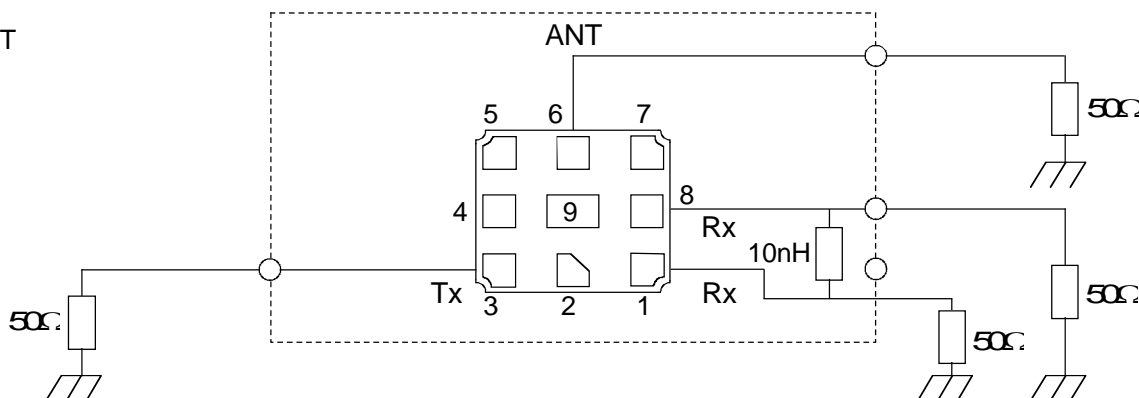
Murata part number :SAYZY1G95CA0B10

## Recommended Land Pattern

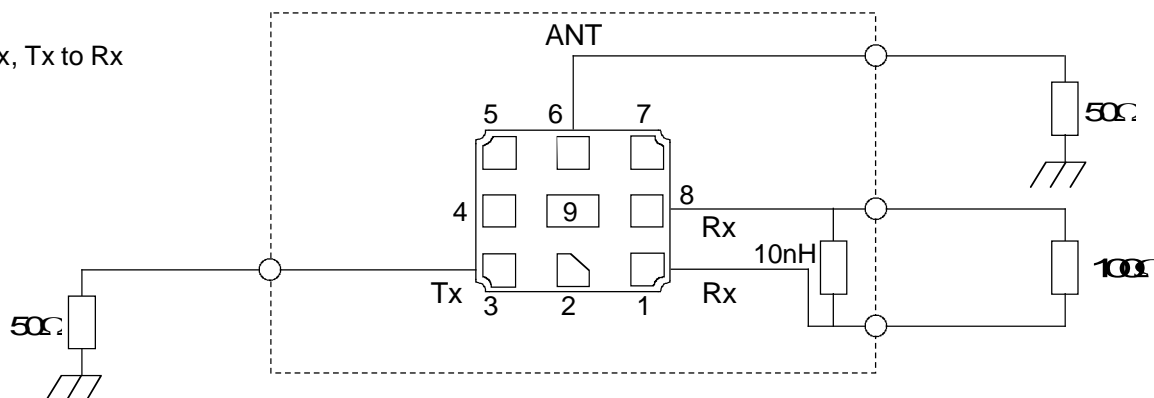


## Test Circuit

Tx to ANT



ANT to Rx, Tx to Rx



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