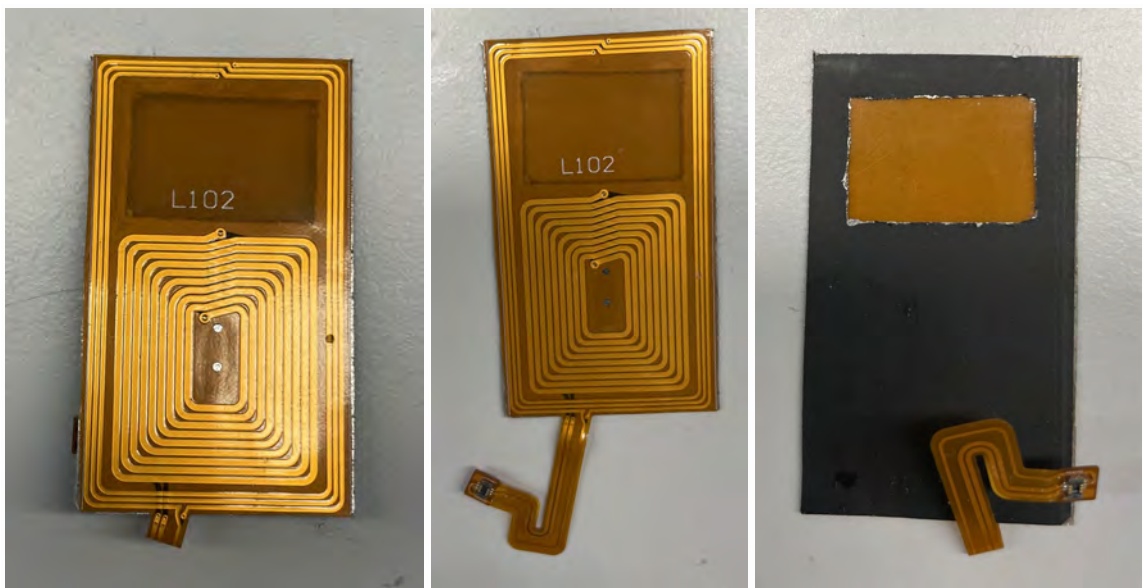


MXX001NC1E.09

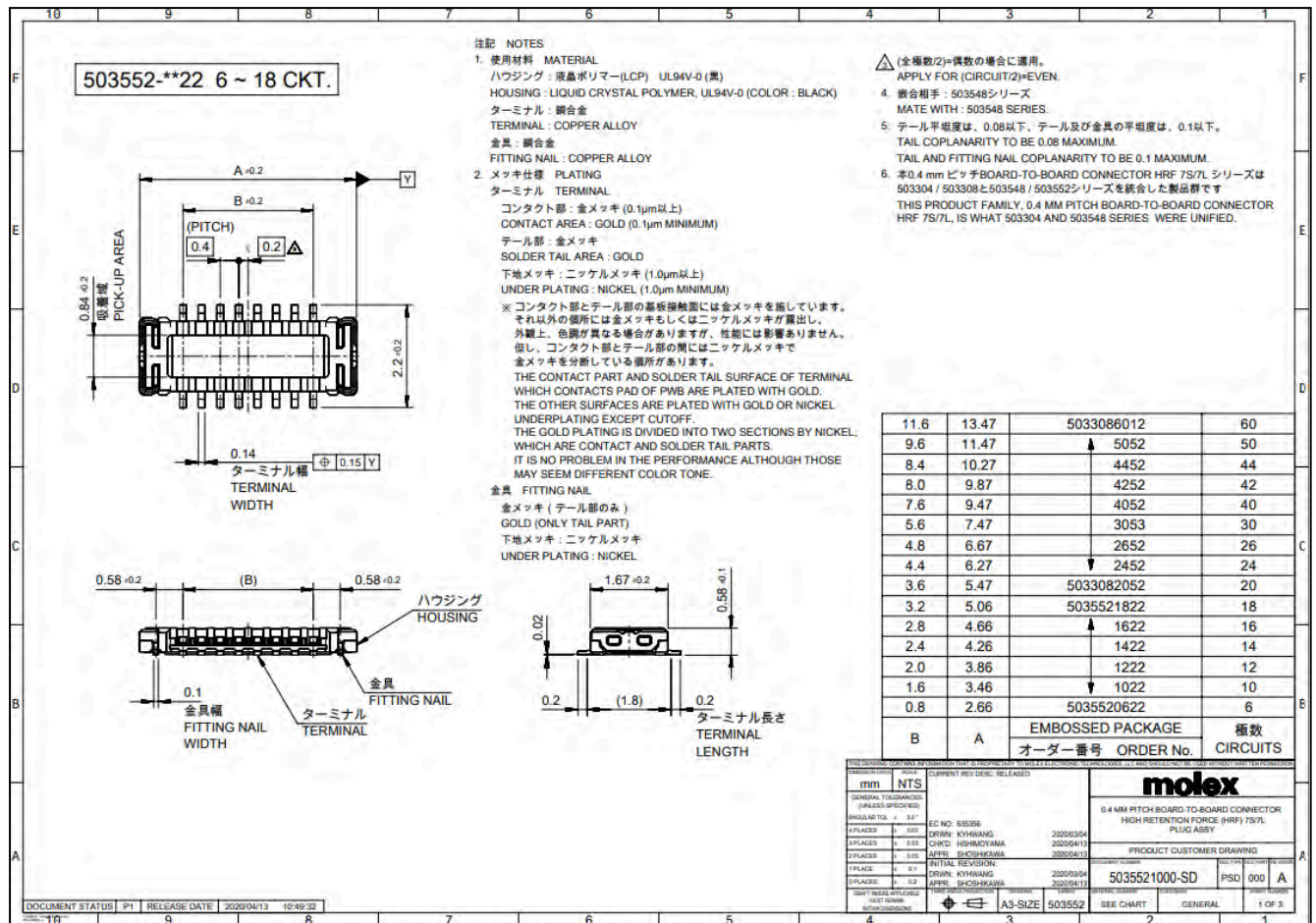
Qi NFC Antenna

DATASHEET Rev. 2.0



1. General description

MXX001NC1E.09 is a double antenna that integrates both Qi coil and NFC antenna. Qi coil is used for inductive wireless charging and NFC antenna for NFC communication.



5. Flex PCB Stackup

FS_QINFC_rev1.0.0_V1.0.0_Specification

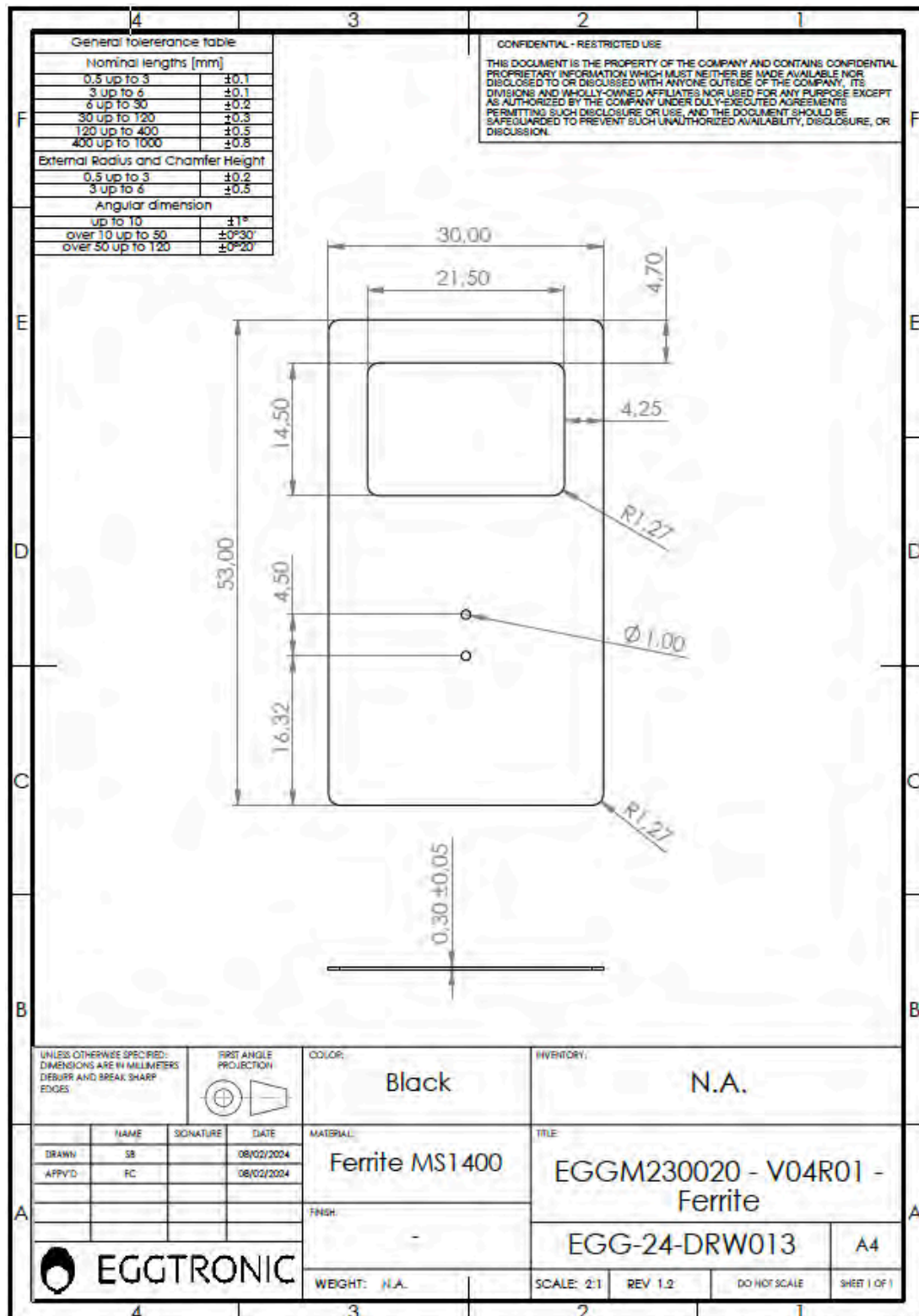
Layer	Name	Thickness	Constant	Base	Ferrite	Stiffener
1	Top Overlay					
	Top Coverlay	0.038mm	3.5			
	Top Layer	0.035mm				
	Adhesive 1	0.013mm	4.1			
	Dielectric 1	0.012mm	4.8			
2	Adhesive 2	0.013mm	4.1			
	Bottom Layer	0.035mm				
	Bottom Coverlay	0.038mm	3.5			
	Bottom Ferrite MS1400	0.300mm	4.5			
	Bottom Stiffener	0.300mm	4.5			
	Bottom Overlay					

Total board thickness (Base): 0.185mm

a. Flex PCB Base Material

Insulation type	ASL-F
Max operative temperature	105°C
Insulation UL file	E301444

EGG-24-DRW013.1.2 - EGM230020 - V04R01 - Ferrite



Shelf life

Storage Conditions		Shelf Life Period	Risks beyond Shelf Life period
Ambient Temperature	23°C ± 3°C	12 Months	Partial functional risk of fail
Humidity	55 ±10% RH		
Environment	Non-acidic and alkaline storage conditions		

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General tolerances table

Nominal lengths (mm)	
0.5 up to 3	±0.1
3 up to 6	±0.1
6 up to 30	±0.2
30 up to 120	±0.3
120 up to 400	±0.5
400 up to 1000	±0.8

External Radius and Chamfer Height

0.5 up to 3	±0.2
3 up to 6	±0.5

Angular dimension

up to 10	±1°
over 10 up to 50	±0°30'
over 50 up to 120	±0°20'

FPCB base specifications

Insulation type	ASL-F
Max operative temperature	105°C
Insulation UL file	E301444

Table 1: Material and Quantity

#	Name	Material	Q.tty
1	L102 antenna	FPCB	1
2	EGGM230020 - V04R01 - Femite	MS1400	1
3	EGGM220020 - V01R01 - Shiffener	FR-4	1

Table 2: Product Identification

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 3: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 4: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 5: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 6: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 7: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 8: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 9: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 10: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 11: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 12: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 13: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 14: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 15: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 16: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 17: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 18: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 19: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 20: Project Information

NAME	DATE	MATERIAL	REV
38	26/03/2024	See table	1.2
PC	26/03/2024		

Table 21: Project Information

NAME	DATE	MATERIAL	REV