



Kunshan Innowave Communication Technology Co.,Ltd.

Admission

Company Name: i. safe MOBILE GmbH

Product Name: IS540 antenna

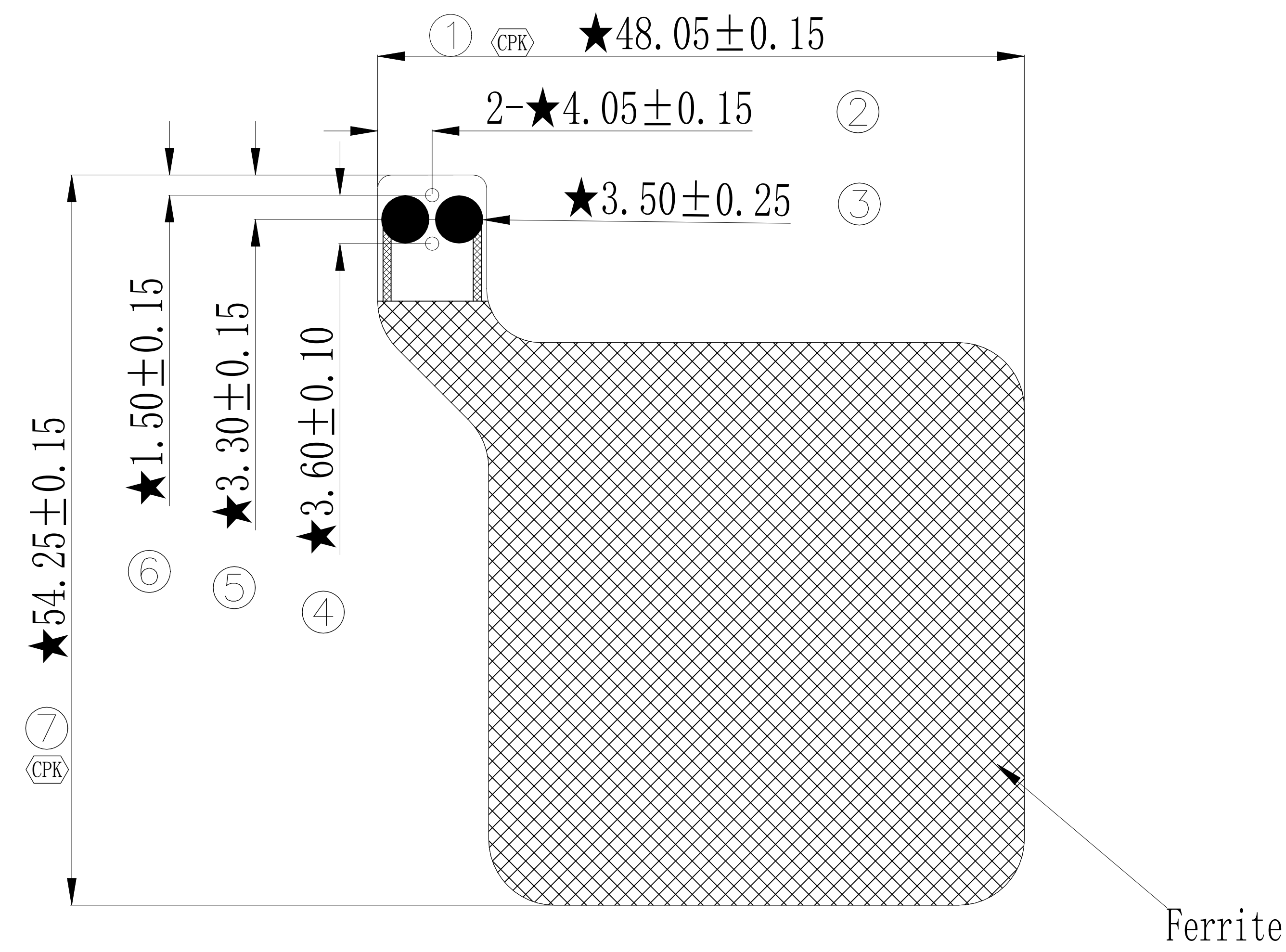
Model: IS540 NFC antenna (L914)

Date: 2023. 2. 16

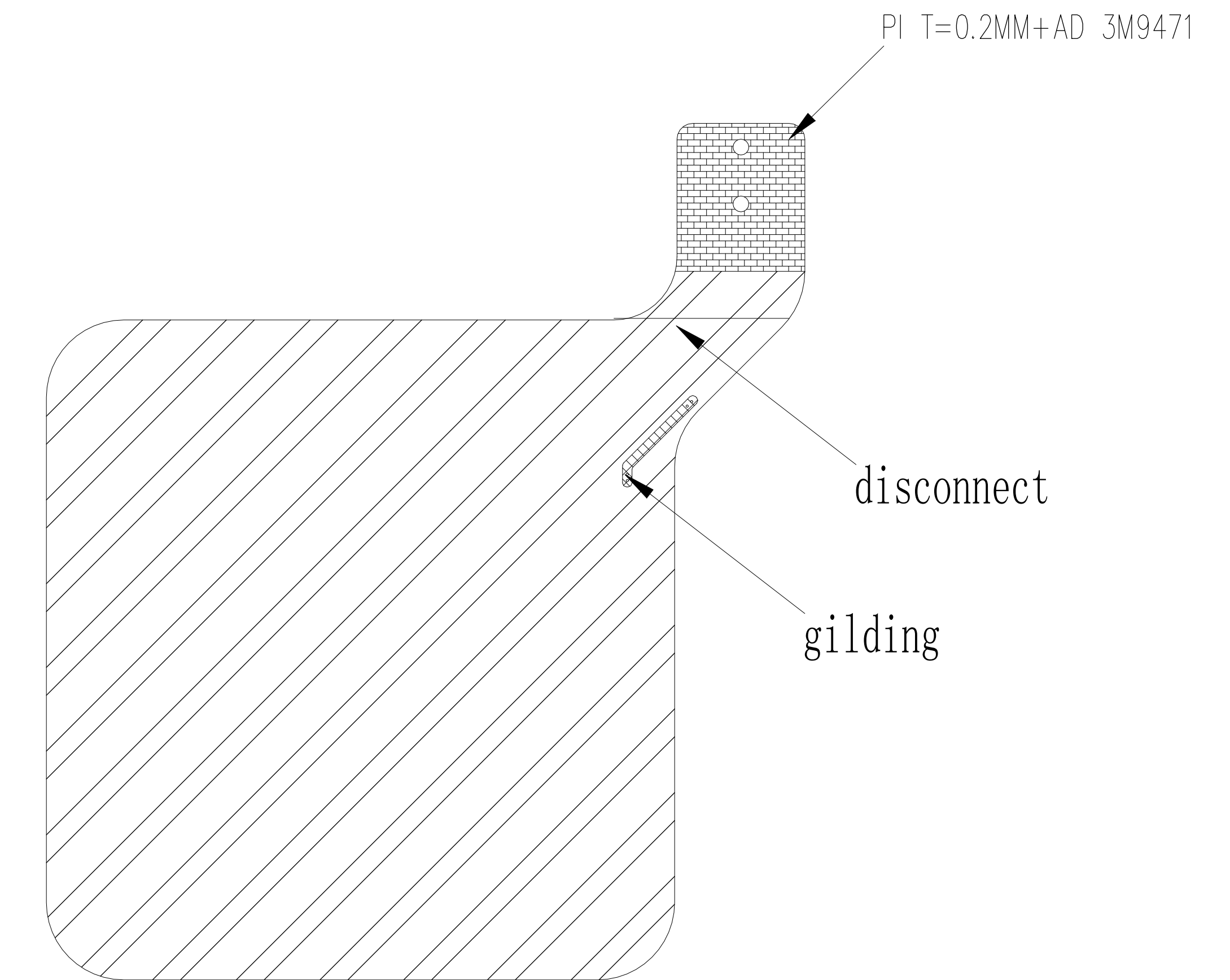
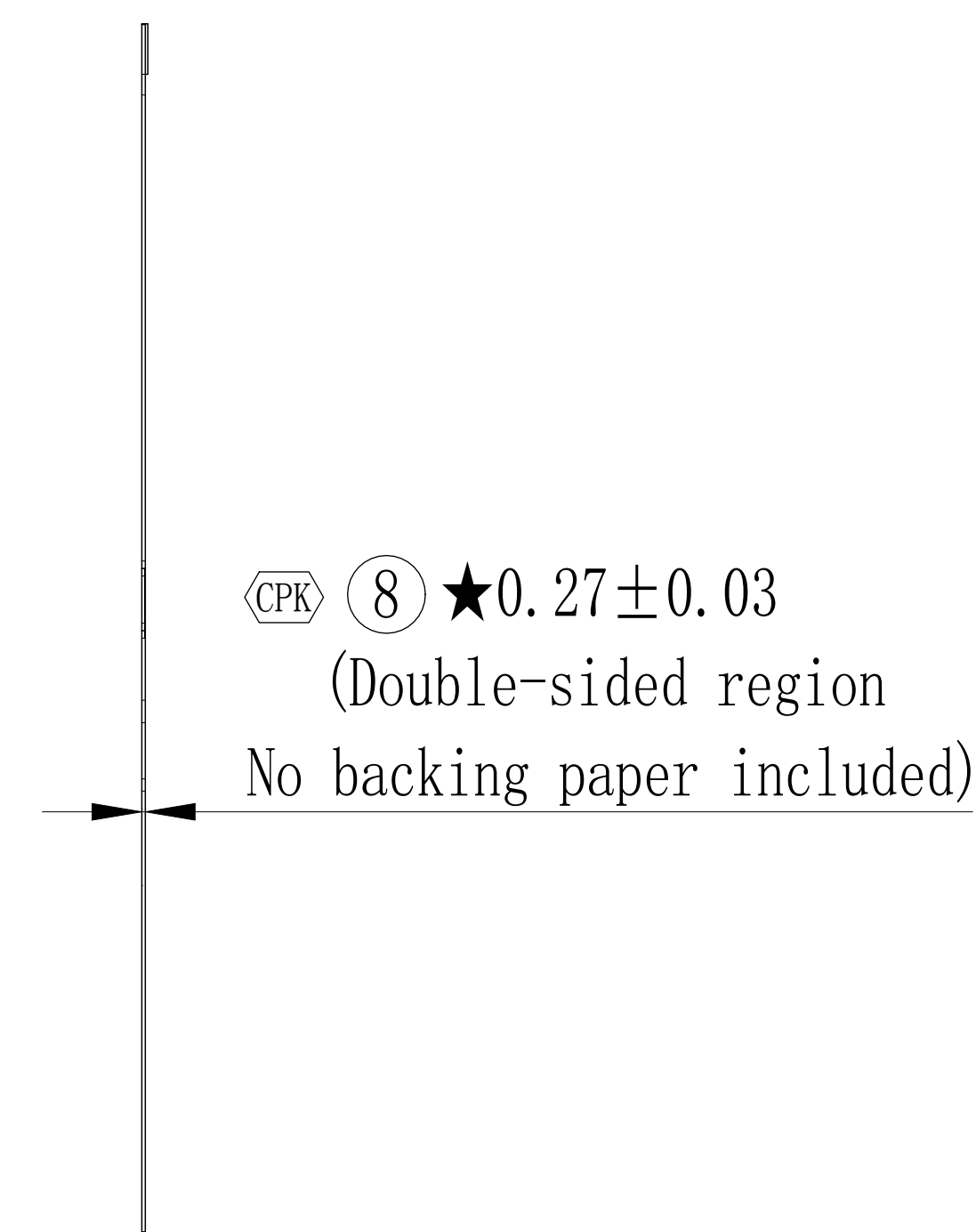
Address: i_Park Tauberfranken 10 97922 Lauda-Koenigshofen Germany

涉密图档

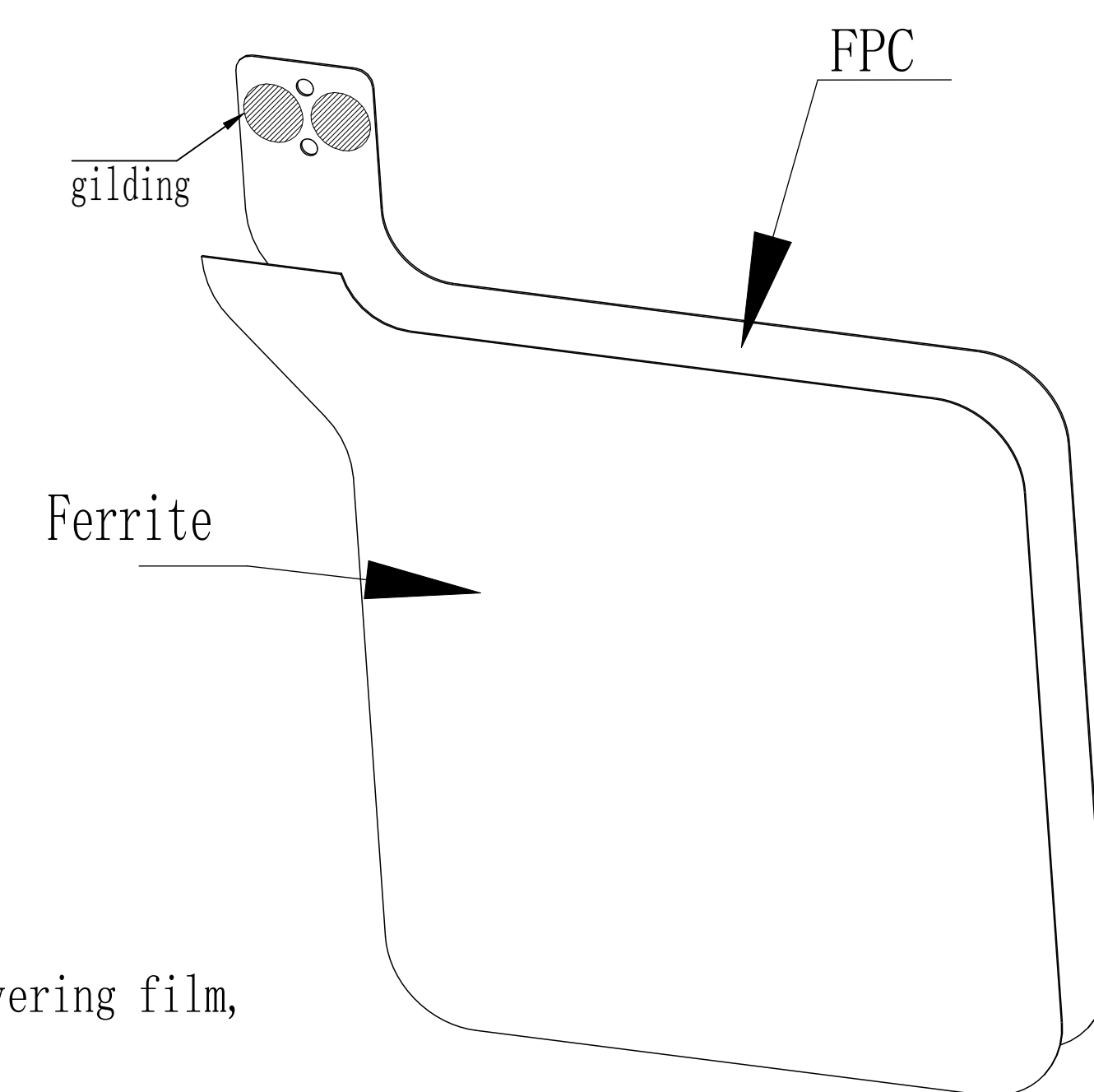
Version	Mark	Modify content	Sign	Date
V01		Mass production release	Lin Zhaowei	2023.02.20



Front



Negative




Stack diagram

Skills requirement :

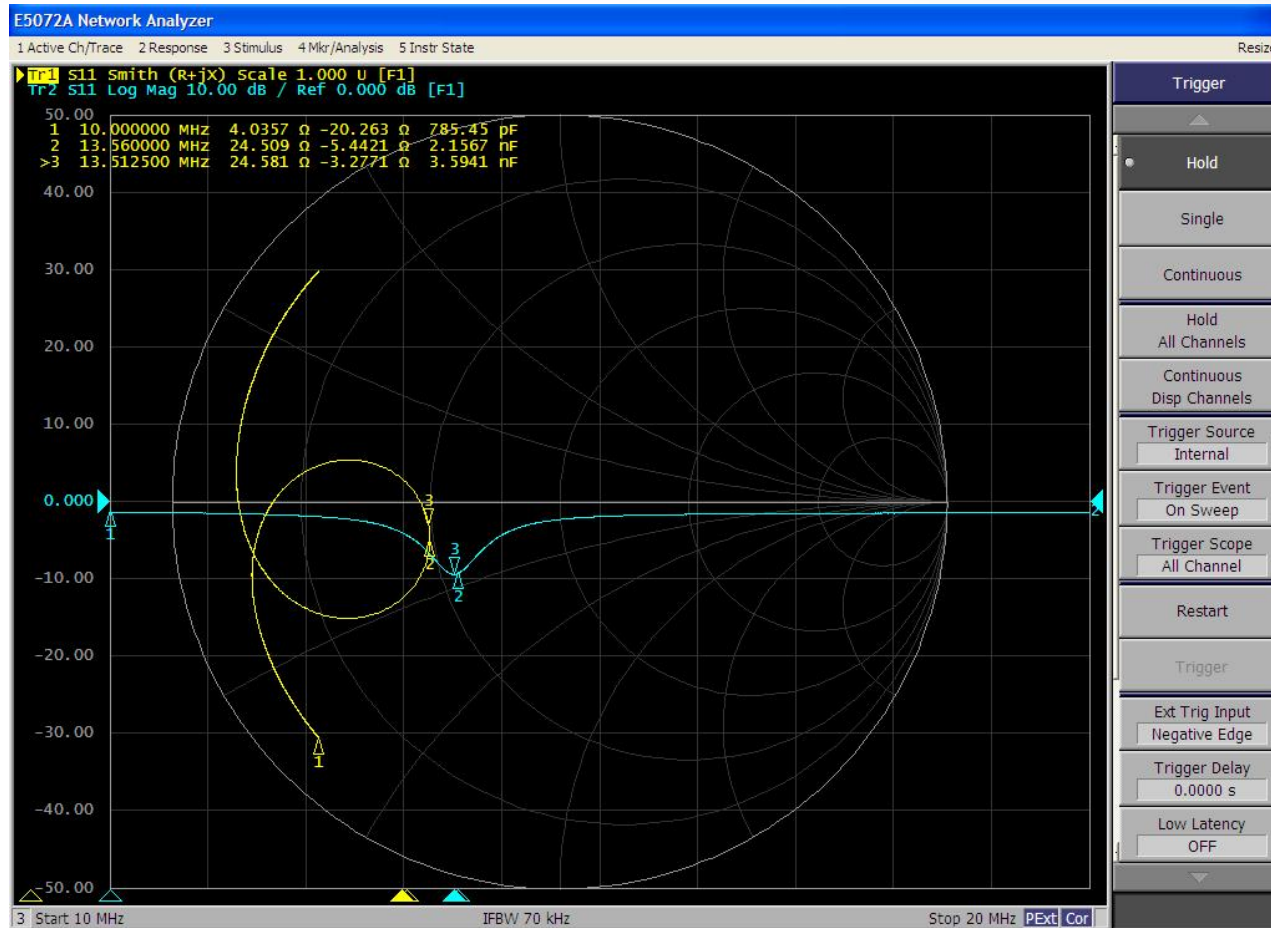
- The front side represents the part of the FPC laying copper traces covering the ink or covering film, The back represents the back collagen-packed adhesive tape part ;
- “★” Size is key size , “CPK” Need to make CPK size , “()” Is the actual size , “△” For design changes ; Refer to the tolerance table for tolerances not noted ;
- The surface is clean, no dirt, no copper exposed, falling off and other defects ;
- The white line is the largest shape of FPC , The orange wire is the antenna patten; The blue line is the release paper cutting line , The red line is the antenna change mark ;
 Gilded area , Adhesive area , Torn bit for release paper ;
- Satisfy related reliability tests such as salt spray test/adhesion test , According to our internal RX-WI-QAC-014 Implementation of reliability test standards , All materials are in line with our company RX-WI-QAC-008 Product Environmental Substance Prohibition Management Standard Products must meet WT-WI-D003 《Restriction Standards for Hazardous Substances 》 ;
- Ziplock bag, foam box packing delivery (50pcs/100pcs per bag) each bag affixed with the quantity label ;
- The product packaging must be clean and tidy, and the packaging process must not cause any contamination to the product .

Tolerance table

>200	± 0.20	ANGLES
100-200	± 0.18	
50-100	± 0.15	± 1°
10-50	± 0.13	
0-10	± 0.10	

Model	IS540 (L914)		Design	Lin Zhaowei	Date	2023.02.20
Name	IS540-NFC		R F	Lin Huanjian	Date	2023.02.20
Part No	F05391403110005		Audit	Xie Yuqing	Date	2023.02.20
Version	V01	Frame	A4	 KunShan INNOWAVE Communication Technology Co.Ltd		
Proportion	1:1	第三视角 				
Unit	MM					

Impedance debugging



$f_r/w = 13.60\text{MHz};$

$Z@13.56 = 18\Omega;$

performance

acr	T6-DU	type1	type2	type3	type4	type5
83mm	64mm	46mm	48mm	45mm	25mm	45mm

matching debugging

Componet		original value	debug value
L0	L4801/L4803	160nH	160nH
C0	C4833/C4834	680pF	680pF
	C4830/C4835	120pF	NC
Cs	C4826/C4841	220pF	180pF
	C6970/C6974	220pF	180pF
	C6971/C6975	220pF	180pF
	C4831/C4836	NC	NC
	C6972/C6976	NC	NC
	C6973/C6977	NC	NC
Cp	C4828/C4837	120pF	68pF
	C4829/C4838	33pF	22pF
	R4810/R4811	560 Ω	560 Ω

