LTE-FPC specification

Customer	
Customer Project No.	**Cat-M1**
Deman Project No.	**H3446**
Deman Part No.	**TFPD05H34460011**

Deman	**RF**	**ID**	**QE**	**PM**
	Chen Chen	**Liu Wubin**	**Ruan Chunhui**	**Ma Hengzhou**

Customer	**ID**	**RD**	**QE**	**PM**

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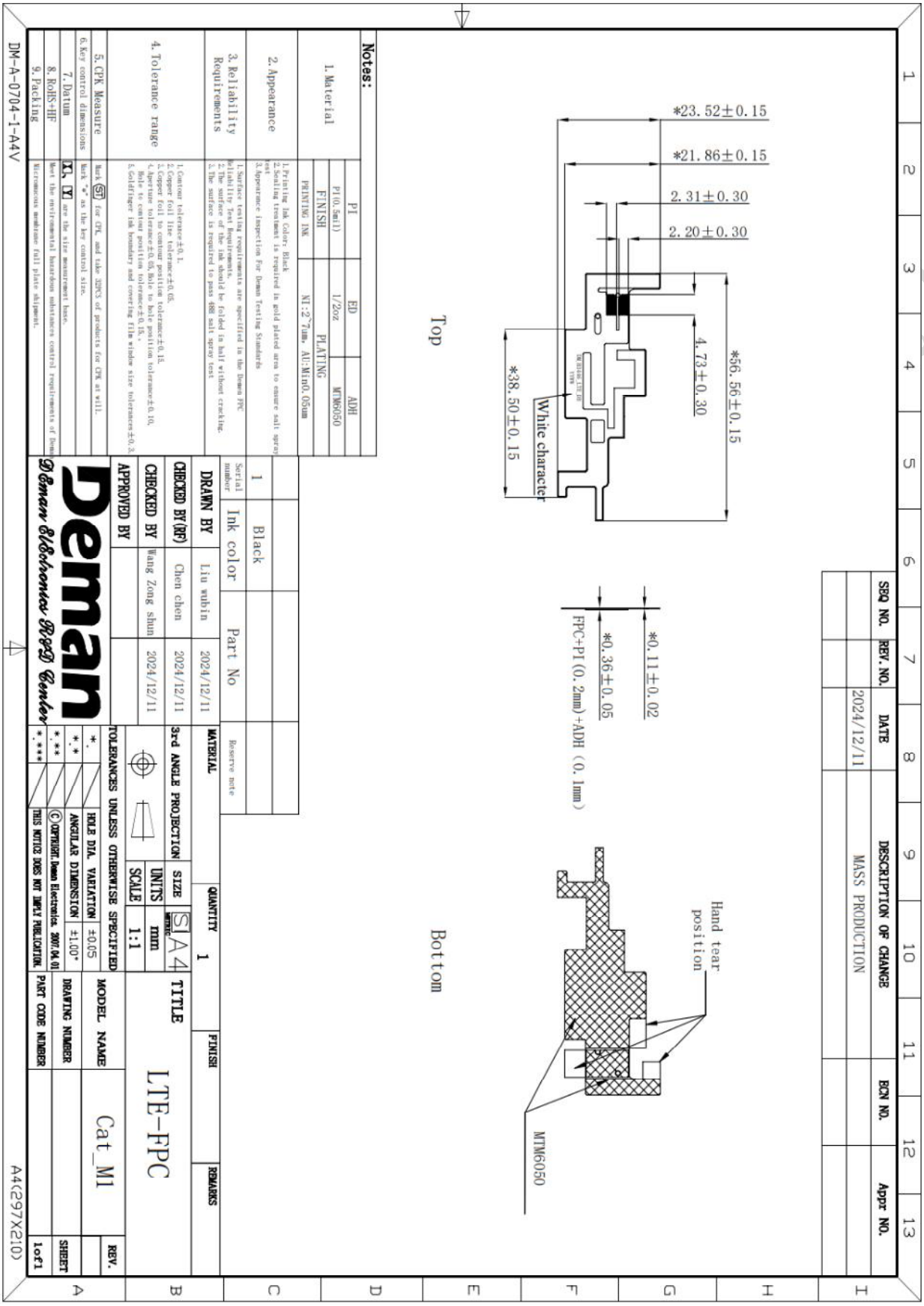
Date : 2024.12.11

Shanghai Deman Electronic Technology Co., Ltd
Shenzhen Deman Electronics Co.,Ltd

Antenna structure diagram:



Design Specifications	Typical	Units
Antenna	FPC	
working Frequency	【699-894】&【1710-2200】	MHz
Gain	【-5.62~2.55】	dBi
Antenna efficiency	【11~ 57】	%
Return loss	<-5	
Ploriaztion	Linear polarization	
Axial Ratio	When the antenna is circularly polarized, note the axial ratio in the operating bandwidth	N/A
Radiation pattern	omnidirectional	
impedance	50 ohm	
Power handling	33	dBm
Interface	shard	
Overal dimensions	See drawing section	
Weight	NA	
Operatin Temp	-30 ----- 70	°
Storing Temp	-30 ----- 70	°

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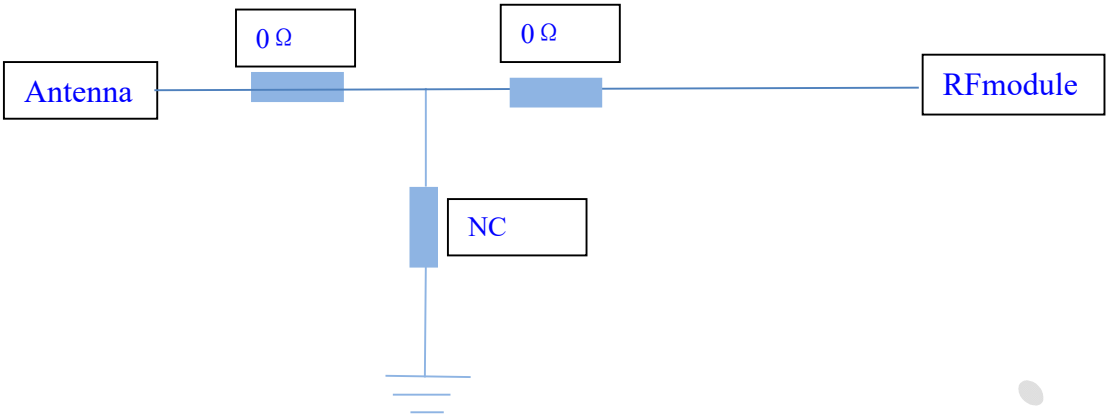
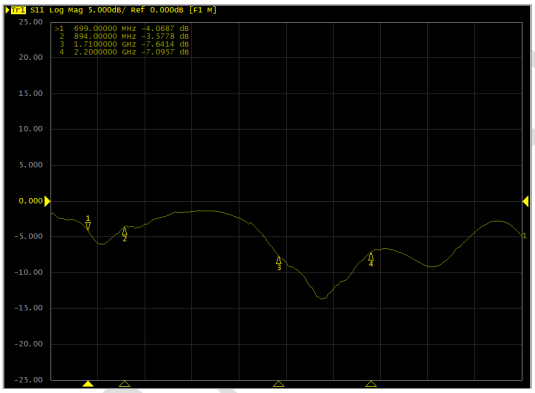
Rf link



Passive performance



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Frequency(MHz)	S11(dB)
699	-4
894	-3
1710	-7
2200	-7

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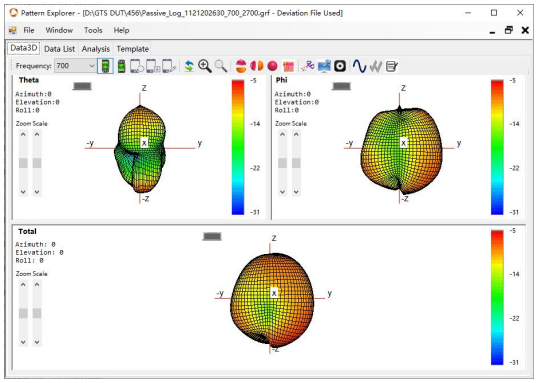
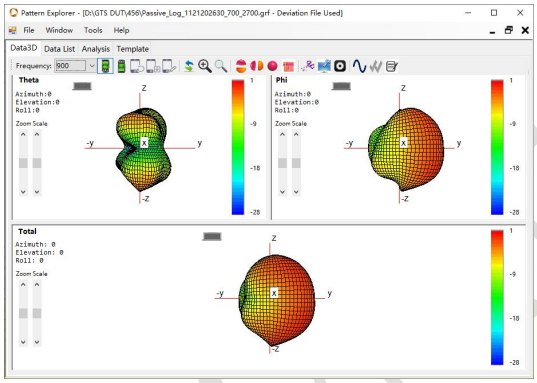
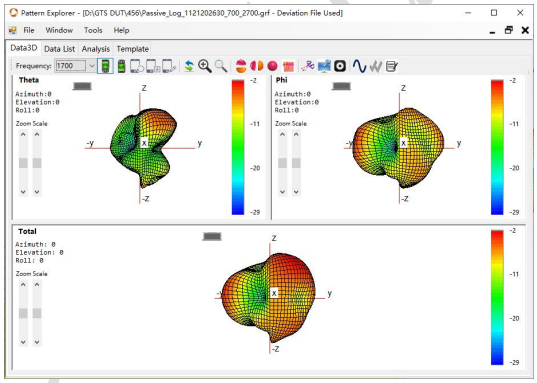
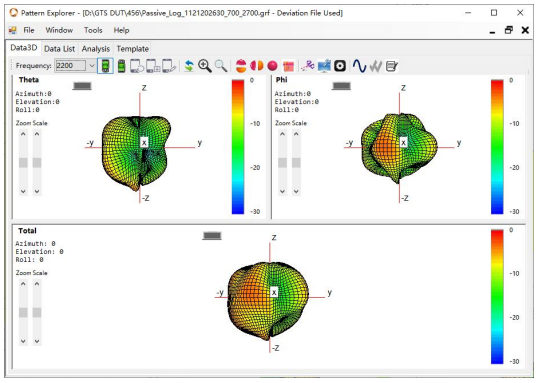
Directional diagram









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Antenna efficiency

Frequency point	efficiency（dB）	Gain(dBi)	Frequency point	efficiency（dB）	Gain(dBi)
700	-9.58	-5.62	1700	-7.32	-2.69
710	-8.52	-4.51	1720	-7.08	-2.64
720	-7.51	-3.43	1740	-6.42	-1.73
730	-6.88	-2.9	1760	-5.94	-1.37
740	-6.09	-2.19	1780	-5.5	-1.1
750	-5.16	-0.97	1800	-4.92	-0.65
760	-4.39	0.03	1820	-4.5	-0.23
770	-3.8	0.79	1840	-4.41	-0.2
780	-3.15	1.56	1860	-4.59	-0.35
790	-2.86	2.01	1880	-4.69	-0.47
800	-2.48	2.39	1900	-4.04	0.19
810	-2.4	2.53	1920	-3.43	0.81
820	-2.43	2.54	1940	-3.09	1.06
830	-2.4	2.55	1960	-2.95	1.04
840	-2.73	2.21	1980	-3	0.85
850	-3.04	1.86	2000	-3.05	0.88
860	-3.25	1.65	2020	-3.19	0.88
870	-3.29	1.49	2040	-3.32	0.91
880	-3.62	1.19	2060	-3.69	0.69
890	-4.19	0.67	2080	-3.96	0.48
900	-4.7	0.15	2100	-4.21	0.29
			2120	-4.37	0.34
			2140	-4.74	0.19
			2160	-5.42	-0.34
			2180	-5.64	-0.47
			2200	-5.87	-0.7

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