Antenne céramique IoT/LPWA 868 MHz compacte omnidirectionnelle | 0.5dBi

Référence GC-E05

Gain	0.5dBi
Connecteur	PCB
Dimensions (mm)	12 x 4 x 1.6
T° de fonctionnement	-40°C à +85°C

CARACTÉRISTIQUES

NORMES	ZigBee, ISM, SigFox, LoRa
BANDE(S) (MHZ)	868
FRÉQUENCE(S) (MHZ)	863-870
PERTE DE RETOUR (DB)	~-29.4
ROS	~1.1:1
EFFICACITÉ (%)	~38,0
GAIN DE CRÊTE (DBI)	~0,5
GAIN MOYEN (DB)	~-4,4
IMPÉDANCE (OHM)	50
POLARISATION	Linéaire
RAYONNEMENT	Omnidirectionnel
PUISSANCE D'ENTRÉE MAX. (W)	10

Conditions de mesure de l'antenne :

- Montée sur un plan de masse de 50 x 90 mm
- Mesurée dans une chambre anéchoïque certifiée CTIA 3D

SPÉCIFICATIONS

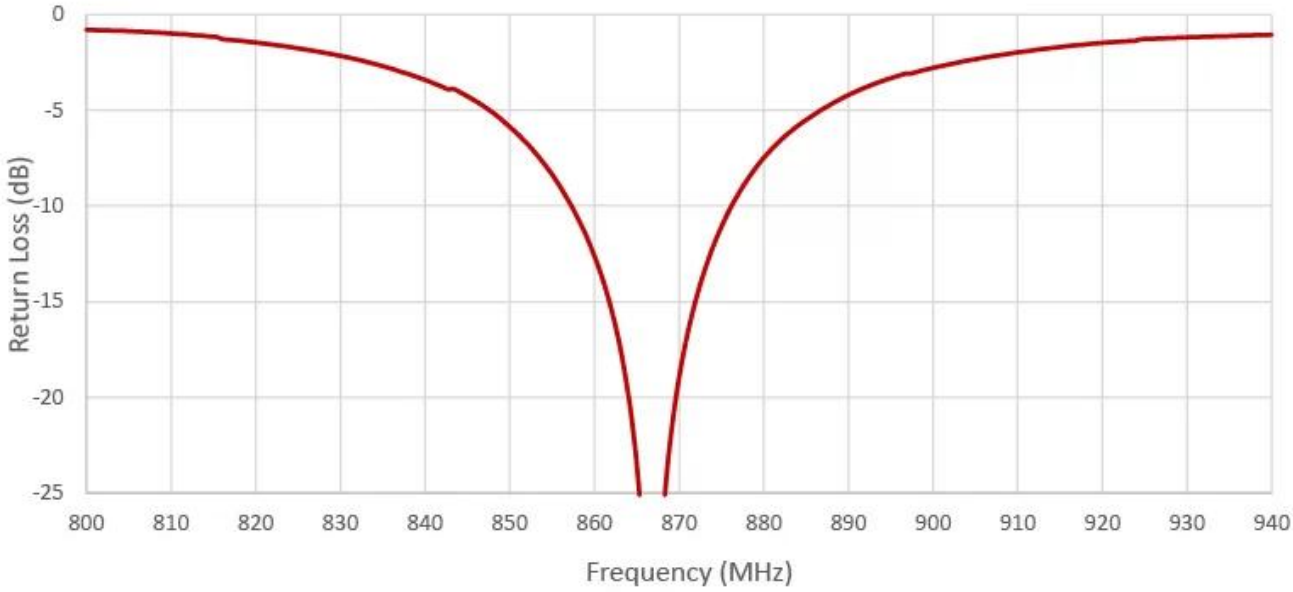
TYPE DE MONTAGE	Pose en surface
DIMENSIONS (MM)	12x4x1.6

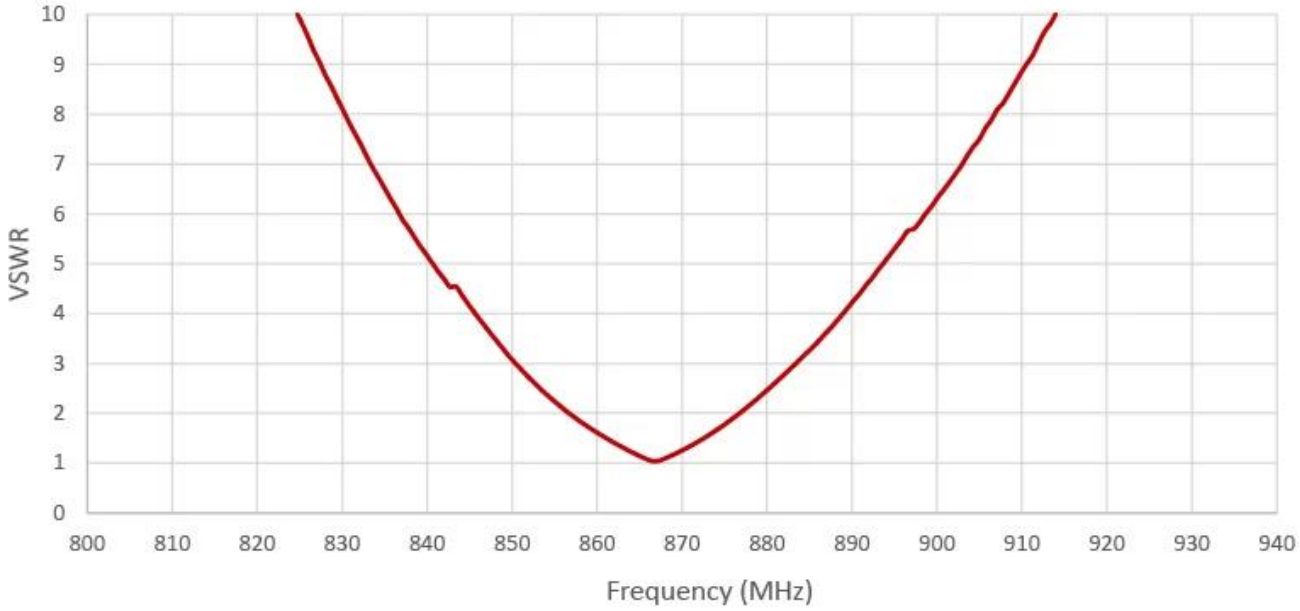
MATÉRIEL	Céramique
T° DE FONCTIONNEMENT (°C)	-40 à +85
T° DE STOCKAGE (°C)	-40 à +85
CERTIFICATION(S)	RoHS
ESSAI DE FORCE DE CISAILLEMENT TYPIQUE	19Kgf selon IEC62137-1-2:2007

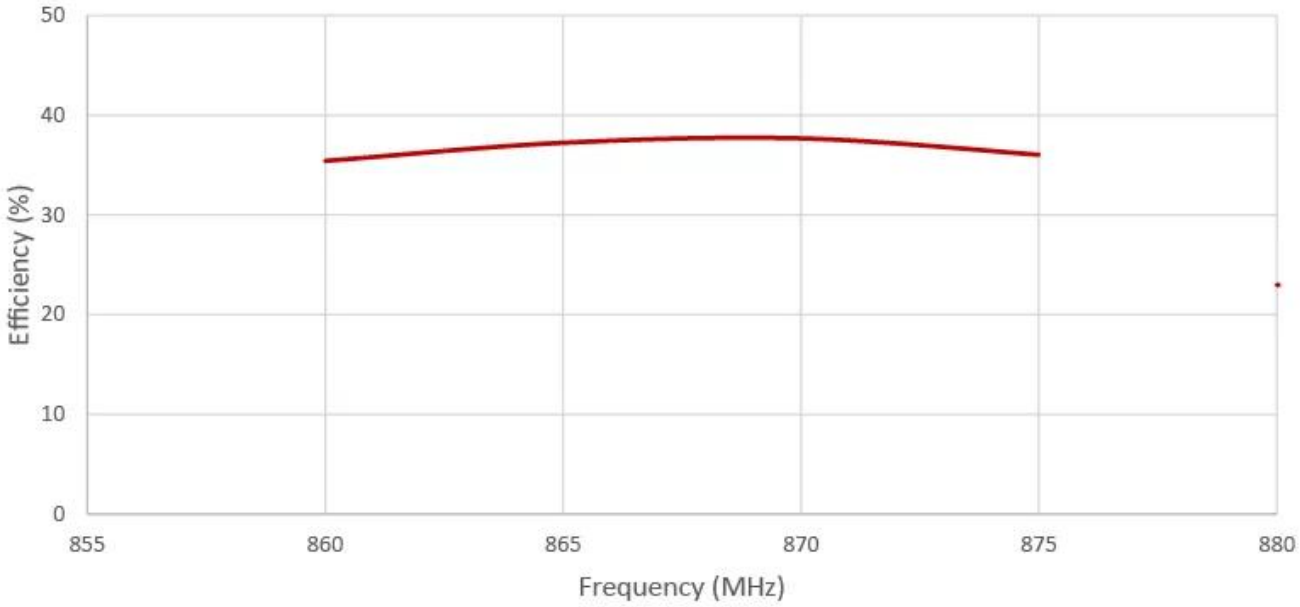
ENVIRONNEMENT

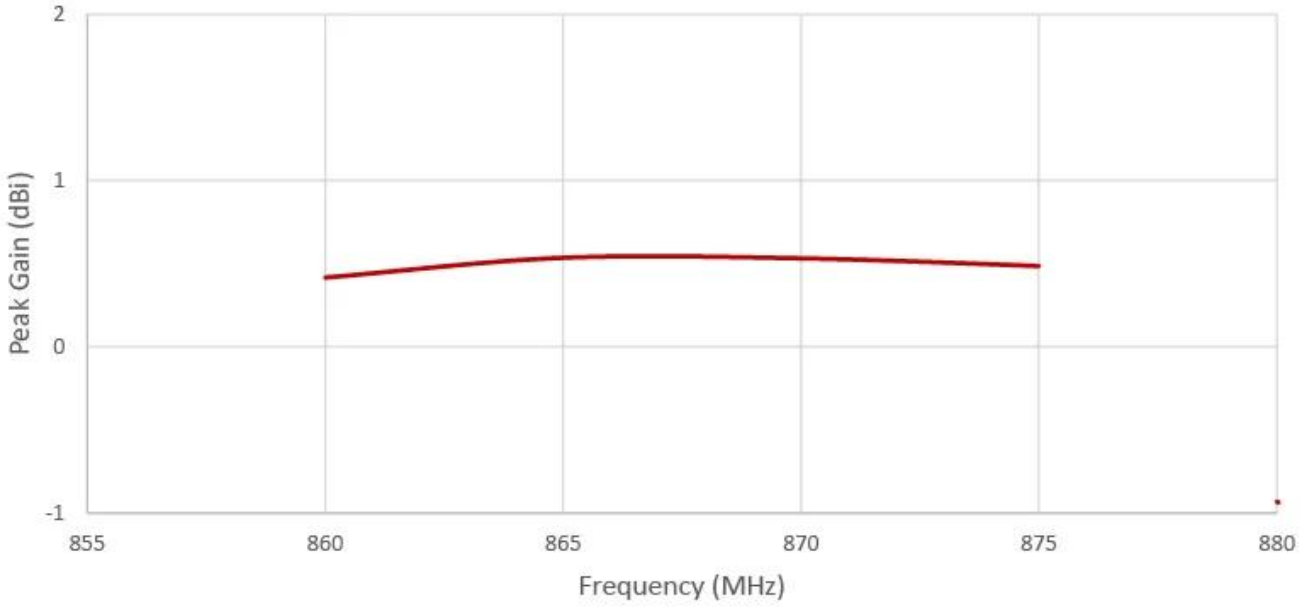
Cette gamme d'antenne est fabriquée sans matières dangereuses tout en maintenant une conformité totale avec **REACH et RoHS**.

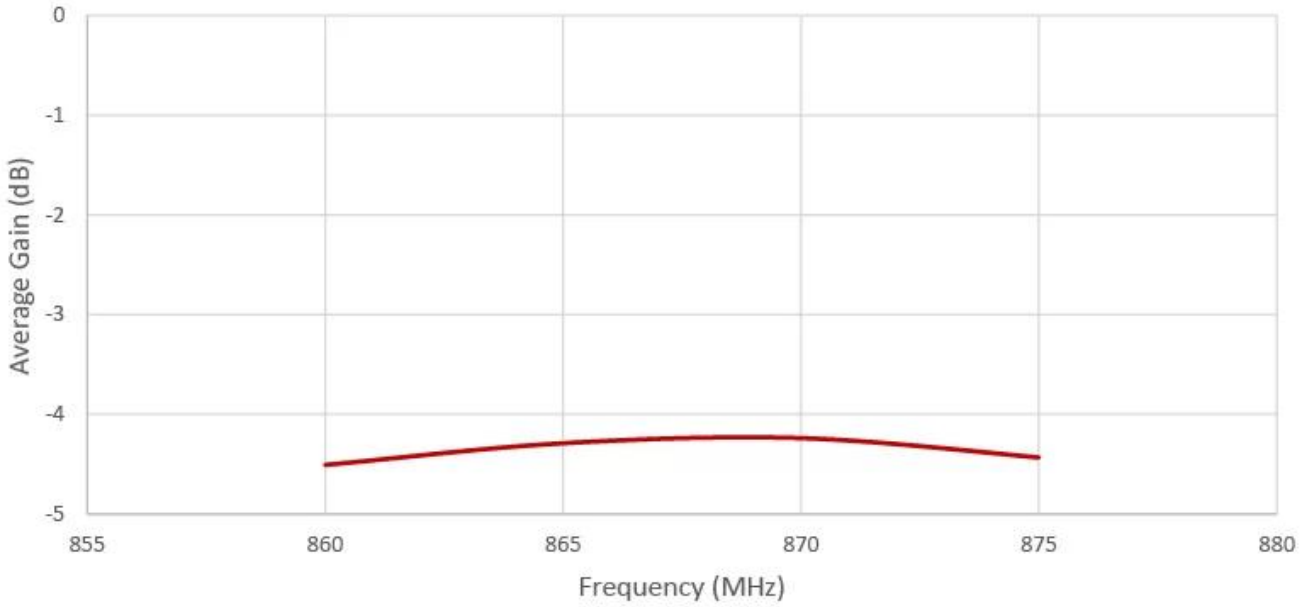
MESURES

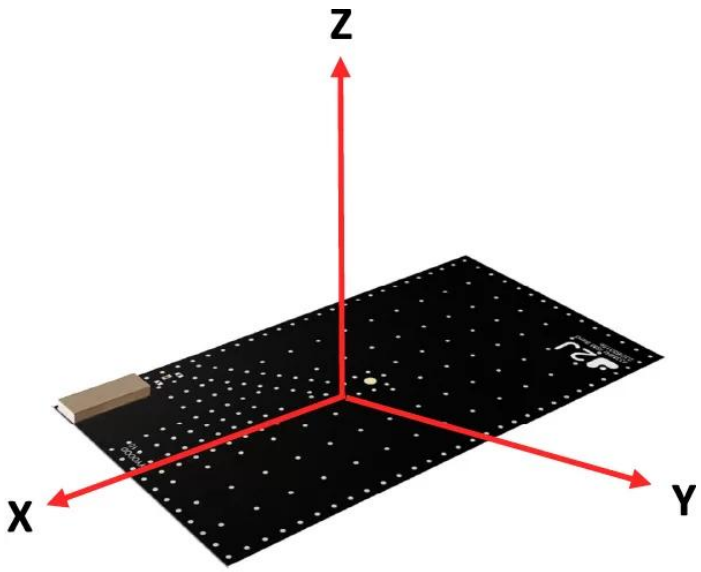

Return Loss (dB)
0
-5
-10
-15
-20
-25
800
810
820
830
840
850
860
870
880
890
900
910
920
930
940
Frequency (MHz)


VSWR
10
9
8
7
6
5
4
3
2
1
0
800
810
820
830
840
850
860
870
880
890
900
910
920
930
940
Frequency (MHz)

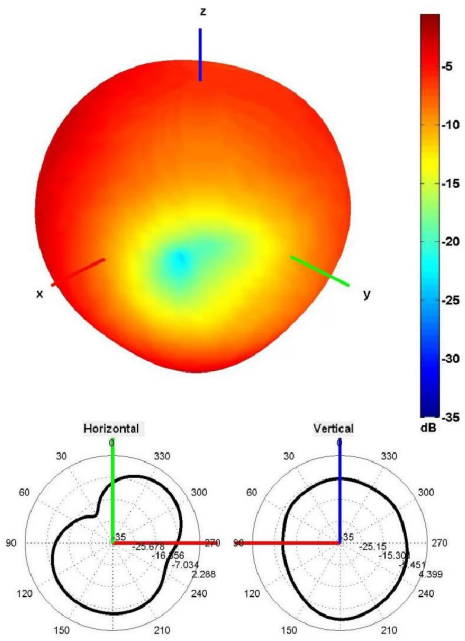

50
40
30
20
10
0
Efficiency (%)
855
860
865
870
875
880
Frequency (MHz)


2
1
0
-1
Peak Gain (dBi)
855
860
865
870
875
880
Frequency (MHz)

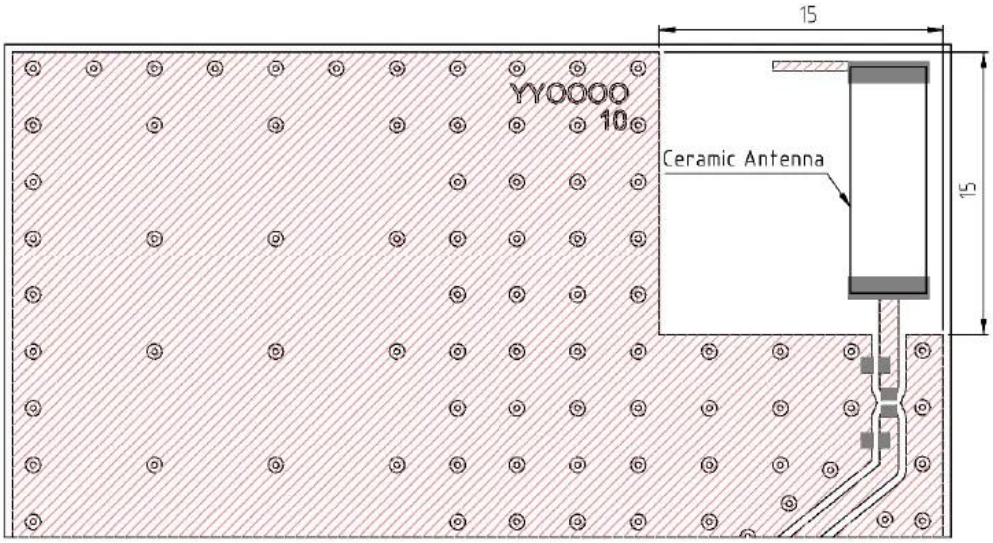




Radiation pattern reference

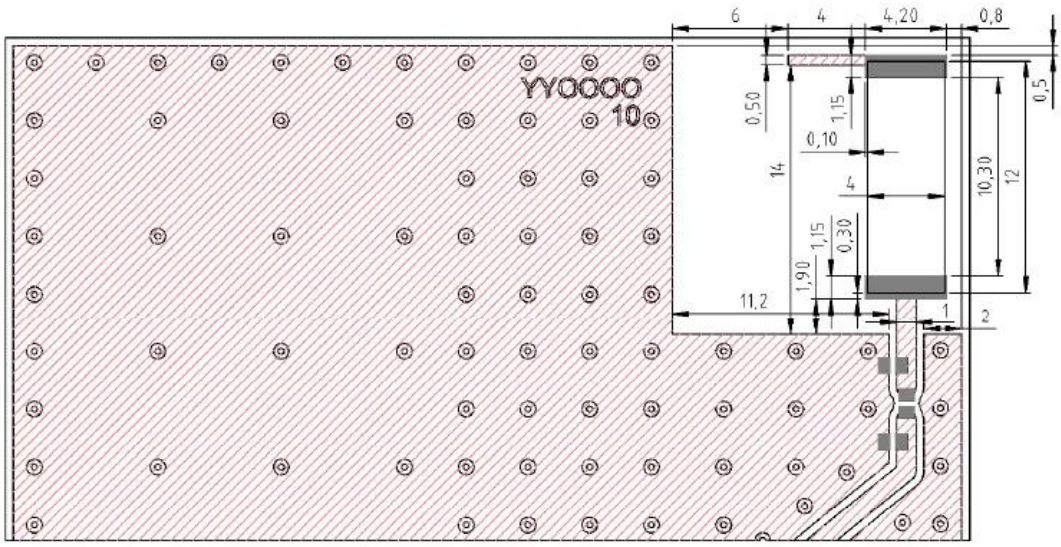


868 MHz Radiation pattern



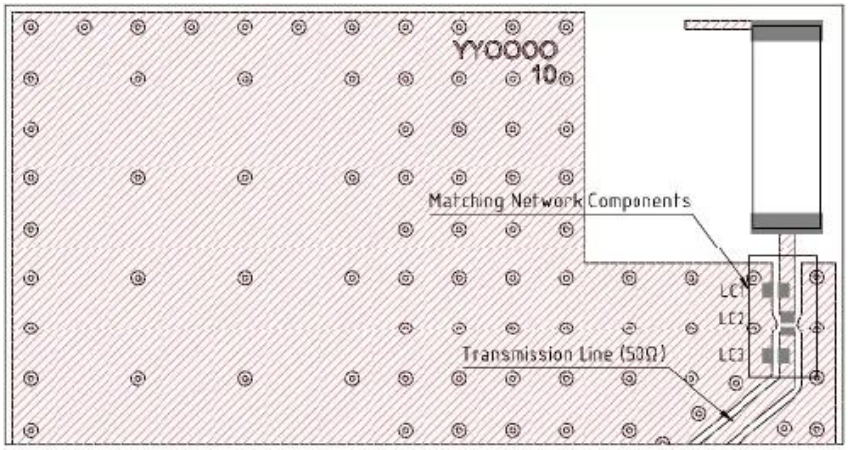
Minimum area required for antenna integration (15mm × 15mm)

Solder Region
Copper Region
Copper-Free Region

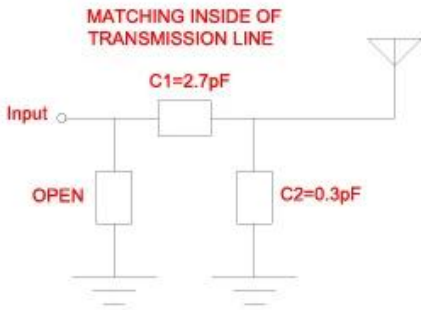


Layout dimensions for antenna integration (mm)

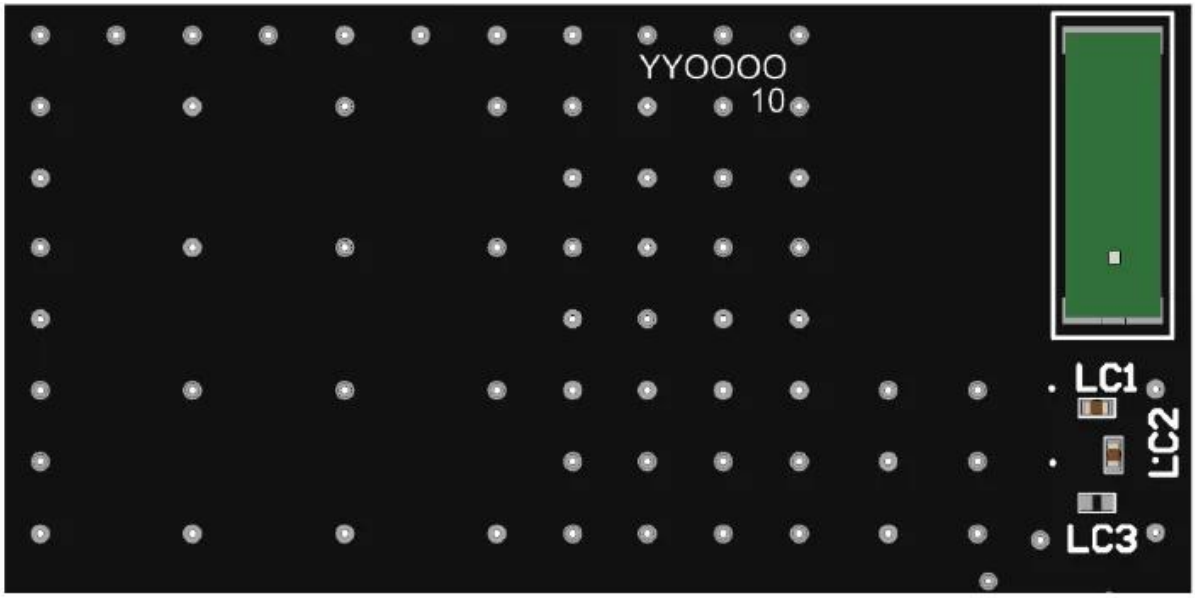
Solder Region
Copper Region
Copper-Free Region



Matching network drawing (LC1=0.3pF, LC2=2.7pF, LC3=OPEN)

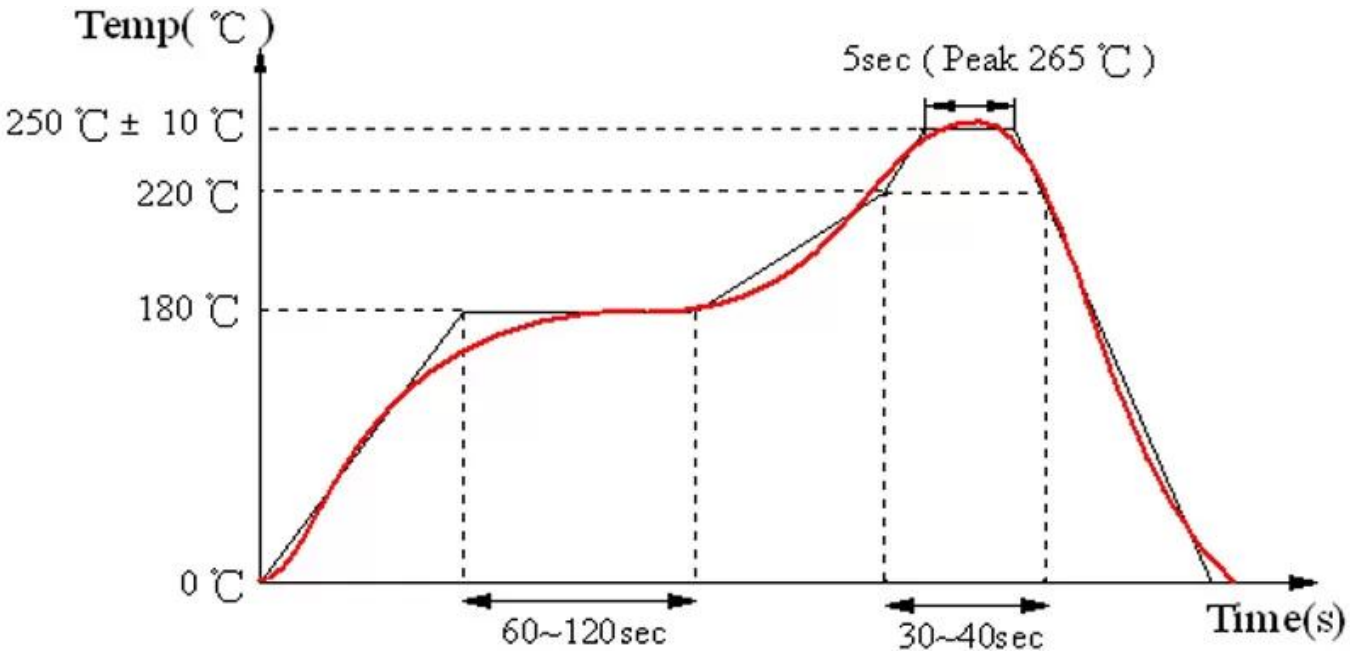


Matching Network Schematic

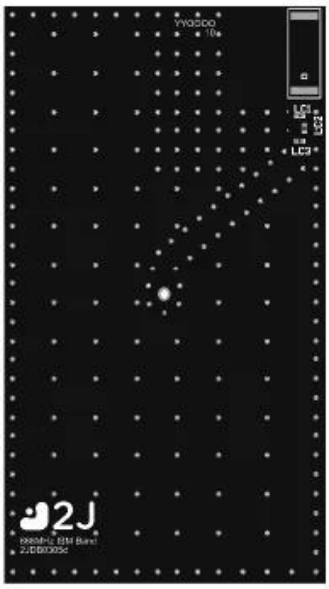


3D View of matching components and recommended values (LC1 = OPEN, LC2=2.7pF, LC3= 0.3pF)

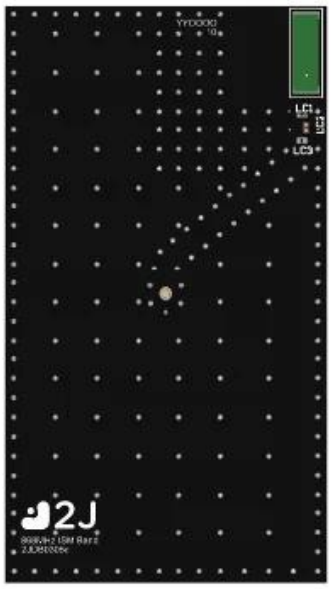
PROFIL DE TEMPÉRATURE DE REFUSION



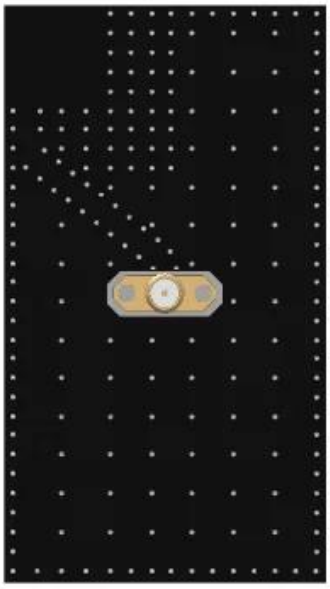
90mm x 50mm	90mm x 50mm	90mm x 50mm	90mm x 11.9mm (PCB: 0.8mm, Antenna: 1.6mm, Connector: 9.5mm)



Front View without Antenna



Front View with Antenna



Back View

Side View