

2.4GHz 1608 Chip Antenna: RANT0603F245S5

Application:

WLAN, 802.11b/g, Bluetooth, WLAN, etc...

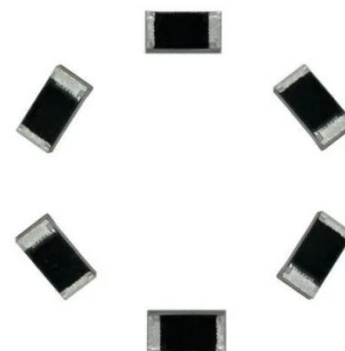
Features

SMD, high reliability, ultra Impact, Omni-directional...

Part number Information

RANT 0603 F 245 S 5
(A) (B) (C) (D) (E) (F)

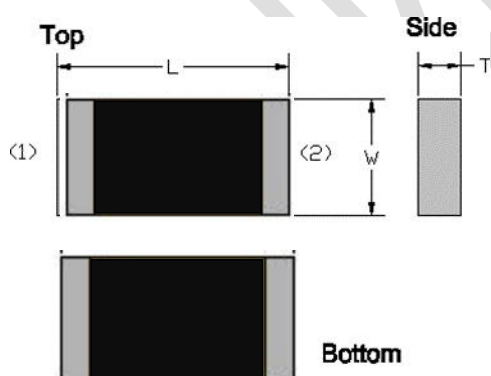
(A)Product Type	Chip Antenna
(B) Size Code	1.6x0.8mm(±0.1mm)
(C) Material	High K material
(D) Frequency	2.4 ~ 2.5GHz
(E) Feeding mode	PIFA & Single Feeding
(F) Antenna type	Type=5



Electrical Specification

Working Frequency Range	2400 ~2500 MHz
Bandwidth	120 MHz (Min.)
Peak Gain	2.7 dBi (Typ.)
Impedance	50 Ohm
Return loss	10 dB (Min)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Operation Temperature(°C)	-40 ~85°C
Resistance to Soldering Heats	10sec. (@ 280°C)
Termination	Ni / Au (Leadless)

Dimension and Terminal Configuration

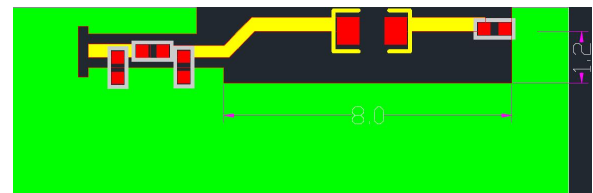
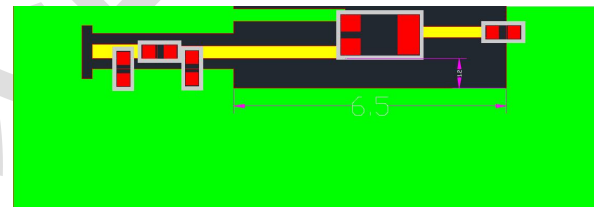
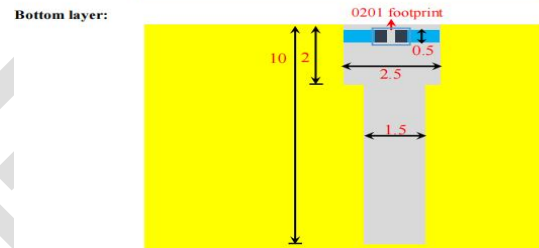
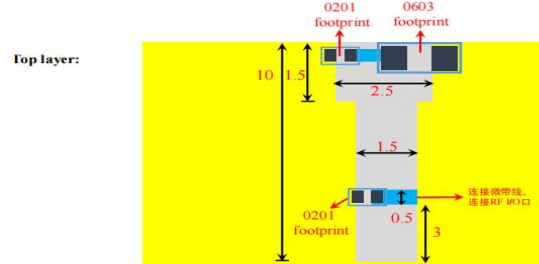
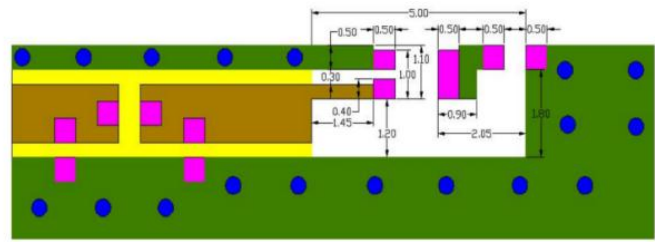


No.	Terminal Name
1	Feeding/GNG
2	GND/Feeding

Dimension (mm)	
L	1.60 ± 0.10
W	0.80 ± 0.10
T	0.45 ± 0.10

PCB Dimension Unit :mm

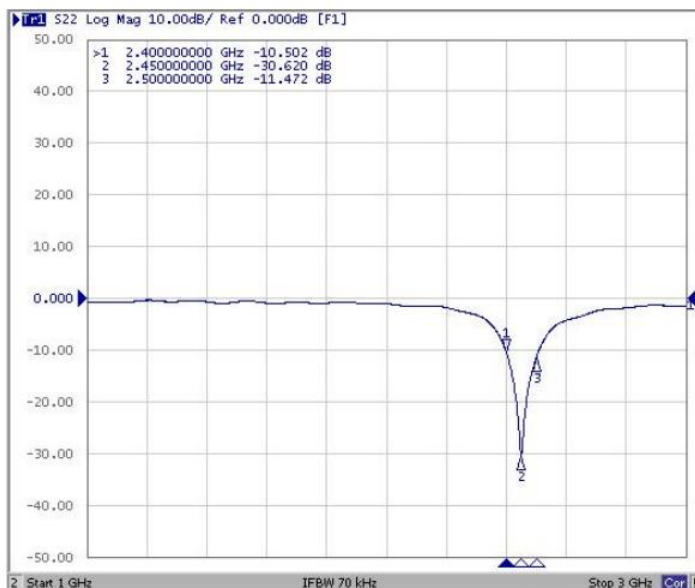
Figure 1 is a plan view of the test section. It shows a rectangular area with a central yellow channel (0.40m wide) and a brown channel (0.50m wide). The section is surrounded by a green area with blue dots. Dimensions include 0.30m, 0.40m, 0.50m, 0.60m, 0.80m, 1.00m, 1.30m, 3.30m, and 4.00m.



Electrical Characteristics

Return Loss & Radiation

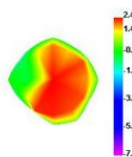
Return Loss



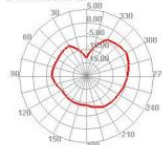
Frequency(MHz)	S11 (dB)
2400	-10.50
2450	-30.62
2500	-11.47

Radiation

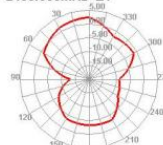
2400.000MHz



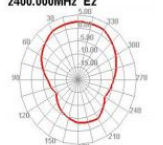
2400.000MHz H



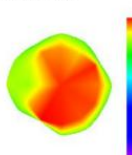
2400.000MHz E1



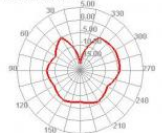
2400.000MHz E2



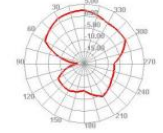
2450.000MHz



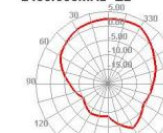
2450.000MHz H



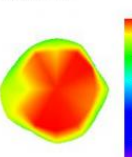
2450.000MHz E1



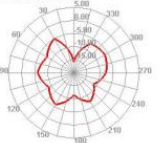
2450.000MHz E2



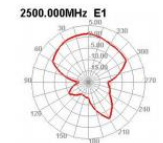
2500.000MHz



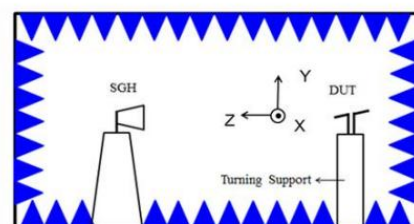
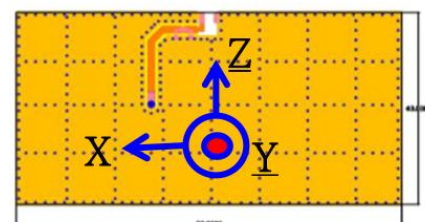
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



Frequency(MHz)	2400	2450	2500
Efficiency(dB)	-0.91	-0.61	-1.01
Efficiency(%)	62	65	60
Gain(dBi)	2.4	2.7	1.5

Taping Specifications

Reel and Taping Specification

Reel Specification

7" x 8 mm

TYPE	SIZE		A	B	C	D
1608	7"	4K/Reel	4.0±0.5	4.0±2	13.5±0.5	178±2

Tapping Specification

Paper Carrier

Packaging	Type	A	B	W	E	F	G	H	T	ψD	P
Paper Type	1608	1.90±0.20	3.50±0.20	8.0±0.20	1.75±0.10	3.5±0.05	4.0±0.10	2.0±0.05	0.75±0.10	1.50±0.10	4.0±0.1