

RFCCOM

ShenZhenShi BeiGuangLianHe Technology Co. Ltd.

Profile Series
52GS_M-TB75I

RFCCOM Embedded Antenna

Preliminary Engineering Data Sheet

***CREATE
VALUE FOR
CUSTOMERS***



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1、Descriptions

This embedded antenna is designed for 2.4GHz Band. Both of wireless Lan IEEE 802.11b/g/n ,Bluetooth and Zigbee .This Antenna provides a high efficiency and a good performance.

2、Features

The 52GS_M-TB75I Embedded Antenna is defined by the following features:

- ④ IEEE 802.11 b/g/n standards
- ④ -0.58 dBi peak gain at 2.4 GHz
- ④ -2.15 dBi peak gain at 2.45 GHz
- ④ -2.33 dBi peak gain at 2.48 GHz
- ④ Cable route and Case mount
- ④ Easy integration

3、Applications

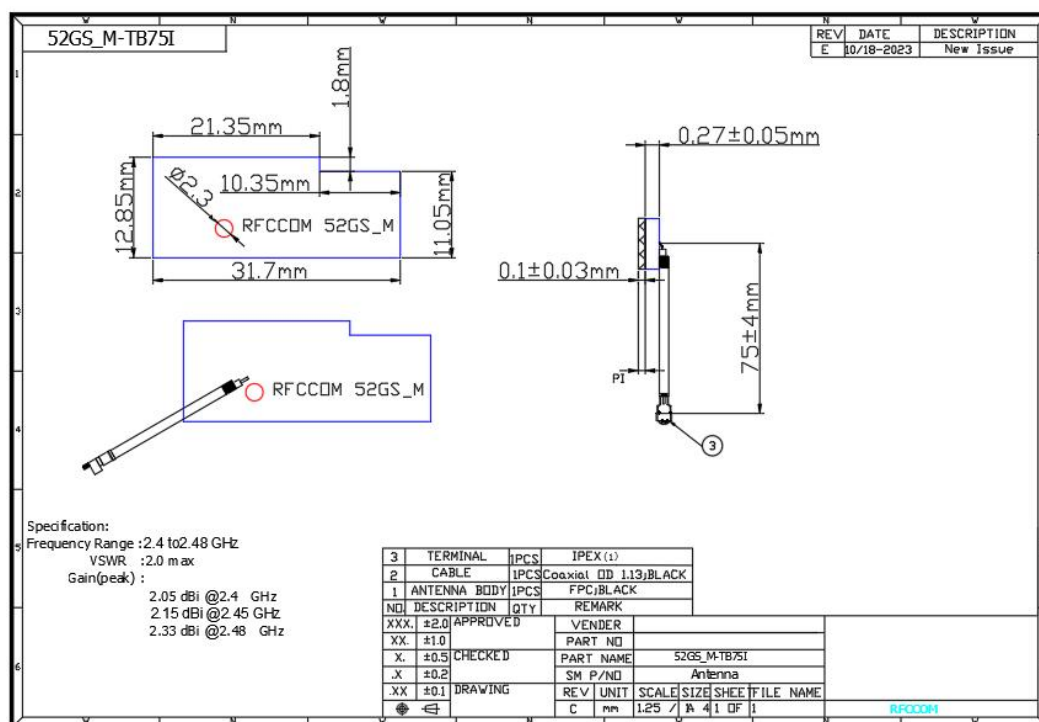
- ④ Wireless LAN
- ④ ISM band 2.4GHz wireless applications
- ④ Bluetooth
- ④ Zigbee



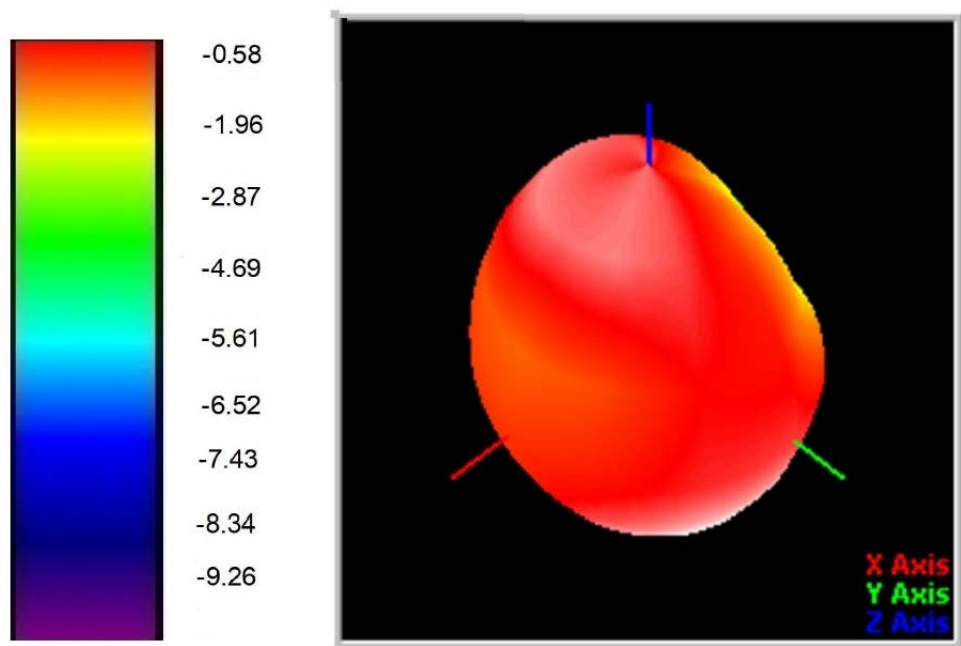
4、Electrical Specifications

Standard	IEEE 802.11n and 802.11 b/g
Frequency range	2.4 to 2.48GHz
Peak gain	-0.58 dBi peak gain at 2.4 GHz -2.15 dBi peak gain at 2.45 GHz -2.33 dBi peak gain at 2.48 GHz
VSWR	2:1
Feed impedance	50 ohms
Power handling	30 dBm
Interface	50 ohms, 1.13 mm diameter, micro coax cable (available with optional U.FL-compatible cable connector and/or cable-mounted EMI ferrites)
Antenna dimensions	31.7 x 12.85 x 0.37mm (L x W x H)
Temperature range	Operating: -40° C to +75° C (-40° F to +167° F) Storage: -40° C to +85° C (-40° F to +185° F)
Humidity range	0% to 95% non-condensing

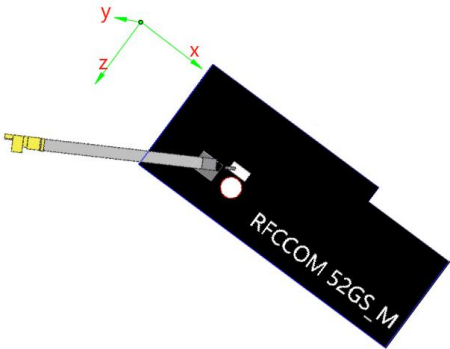
5、Dimensions



6、Radiation Patterns



Frequency (MHz)	Max Gain(dBi)
2400	-0.58



7、Cable Datasheet

Structure characteristics				
Structure	Item		Standard value	
①Inner conductor	Material		Tinned copper wire	
	Makeup:total / O.D. of every wire(mm)		7/0.08	
	(Intertwist)NOM.O.D. (mm)		0.24±0.02	
②Insulation	Material		FEP	
	Color		Clarity	
	NOM.O.D. (mm)		0.7±0.03	
③Outer conductor	Material		Tinned copper wire	
	Makeup:total / O.D. of every wire(mm)		4/0.05	
	NOM.O.D. (mm)		0.92±0.05	
	Coverage ratio(%)		90±5	
④Jacket	Material		FEP	
	Color		Black	
	NOM.O.D. (mm)		1.13±0.05	
Electrical characteristics				
Item	Standard value	Item	Frequency	Standard value Unit:dB/m
Capacitance (pF/m)	98	Attenuation	1GHz	≤2.2
Velocity(%)	70		2GHz	≤3.1
Impedance (Ω)	50±2		3GHz	≤3.8
Standing wave ratio	≤1.3@0~6GHz		4GHz	≤4.4
Max.operating voltage(V)	1000		5GHz	≤4.9
Max.operating frequency (GHz)	6		6GHz	≤5.4
Dependability				
Item		Unit	Standard value	
Min.bending radius static		mm	4	
Operating temperature		℃	-55~+150	



8、Packaging

