2.4GHz Band PCB Antenna

Amphenol

2.4GHz Band PCB Antenna Part Number: PIOV.00M.NRA.A

Features and Benefits

Balanced antenna with independent ground Compact 40mm by 11mm size 85% antenna efficiency for 2.4GHz band antenna

Application

- Telecommunications/Networking
 (Wi-Fi devices, Wireless LAN (WLAN))
- Industrial applications (Machine to machine (M2M) communication, etc.)
- Consumer electronics (CE) applications (Cameras, Mobile gaming devices, etc.)
- Medical

Product Drawing

(Telemedicine and telehealth device, etc.)

• Automotive applications





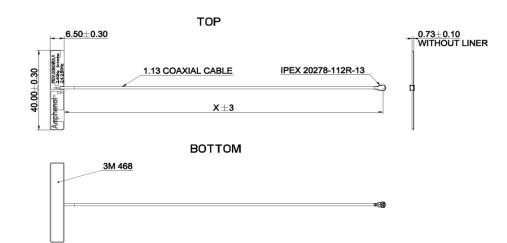
Automotive



Consumer Electronics



Medical



5 IoT Antennas



Specifications

Band (GHz)	2.4	2.48	
Return loss (dB)	-13.2 -15.0		
Efficiency	84%	86%	
Peak gain (dBi)	2.9	2.8	
VSWR	≤1.6		
Impedance	50 ohms		
Polarization	Linear		
Radiation Pattern	Omni-directional		
Test environment	Antenna on 1.5mm thicker plastic carrier in free space		
Power handled	5W		
Dimensions	40*11*0.8mm		
Operation temperature	-40°C ~ +85°C		
Storage temperature	-40°C ~ +85°C		
Weight	0.31 g		
Connector	IPEX MHF		
Cable standard	1.13 coaxial cable, length X (Std.: 150mm)		
RoHS compliant	Yes		
Adhesive	3M 468		

Signal attenuation along cable effect on antenna efficiency

Part Number	Coaxial cable length (mm)	Frequency (GHz)	Peak gain (dBi)	Total efficiency
PIOV.00M.NRA.A-050	50	2.4	3.1	88%
		2.48	3	90%
PIOV.00M.NRA.A-100	100	2.4	3	86%
		2.48	2.9	88%
PIOV.00M.NRA.A-150	150	2.4	2.9	84%
		2.48	2.8	86%
PIOV.00M.NRA.A-200	200	2.4	2.8	82%
		2.48	2.7	84%