Amphenol

5GHz Band PCB Antenna

Part Number: PIOV.00S.NRA.A

Features and Benefits

Balanced antenna with independent ground

Compact 20mm by 12mm size

77% antenna efficiency for 5GHz 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
 (Telemedicine and telehealth device, etc.)
- Automotive applications





Automotive

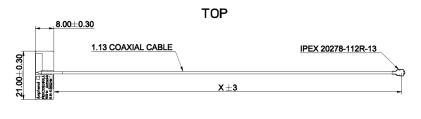


Consumer Electronics



Medical

Product Drawing







Specifications

Band (MHz)	5150 5850			
Return loss (dB)	-11.5	-14.1		
Efficiency	77% 74%			
Peak gain (dBi)	2.8	3.3		
VSWR	≤1.7			
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	20*12*0.8mm			
Operation temperature	-40℃ ~ +85℃			
Storage temperature	-40℃ ~ +85℃			
Weight	0.22 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.00S.NRA.A-050	50	5.15	3.2	85%
		5.85	3.7	81%
PIOV.00S.NRA.A-100	100	5.15	3.0	81%
		5.85	3.5	77%
PIOV.00S.NRA.A-150	150	5.15	2.8	77%
		5.85	3.3	74%
PIOV.00S.NRA.A-200	200	5.15	2.6	74%
		5.85	3.1	71%