

## 2.4GHz/5GHz Band PCB Antenna

Part Number: **PIOV.0MS.NRA.A**



### Features and Benefits

- Balanced antenna with independent ground
- Compact 36mm by 12mm size
- 73% antenna efficiency for 2.4GHz/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

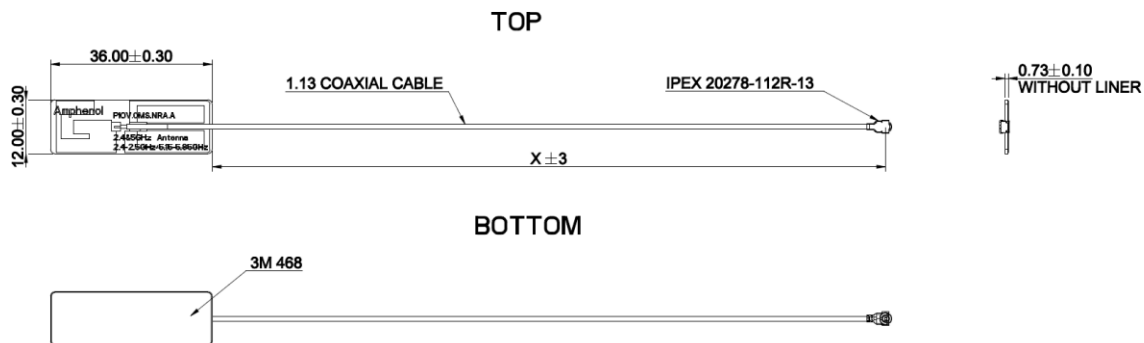


Consumer Electronics



Medical

### Product Drawing



## Specifications

Band (GHz)	2.4	2.48	5.15	5.85
Return loss (dB)	-12.5	-9.5	-11.9	-29.6
Efficiency	70%	72%	72%	73%
Peak gain (dBi)	3.8	3.8	4.4	4.8
VSWR	≤2			
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	36*12*0.8mm			
Operation temperature	-40°C ~ +85°C			
Storage temperature	-40°C ~ +85°C			
Weight	0.55 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.0MS.NRA.A-050	50	2.4	4	74%
		2.48	4	76%
		5.15	4.8	78%
		5.85	5.2	79%
PIOV.0MS.NRA.A-100	100	2.4	3.9	72%
		2.48	3.9	74%
		5.15	4.6	75%
		5.85	5.0	76%
PIOV.0MS.NRA.A-150	150	2.4	3.8	70%
		2.48	3.8	72%
		5.15	4.4	72%
		5.85	4.8	73%
PIOV.0MS.NRA.A-200	200	2.4	3.6	68%
		2.48	3.6	70%
		5.15	4.2	69%
		5.85	4.6	70%