

2G/3G Cellular Band PCB Antenna

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



Features and Benefits

- Balanced antenna with independent ground
- Compact 70mm by 25mm size
- 50% antenna efficiency for 2G/3G cellular band antenna

Application

- Smart home
- Industrial applications (Machine to machine (M2M) communication, etc.)
- Consumer electronics (CE) applications (Mobile POS, Mobile gaming devices, etc.)
- Medical (Telemedicine and telehealth device, etc.)
- Automotive applications (T-Box, Infotainment devices, etc.)



Automotive

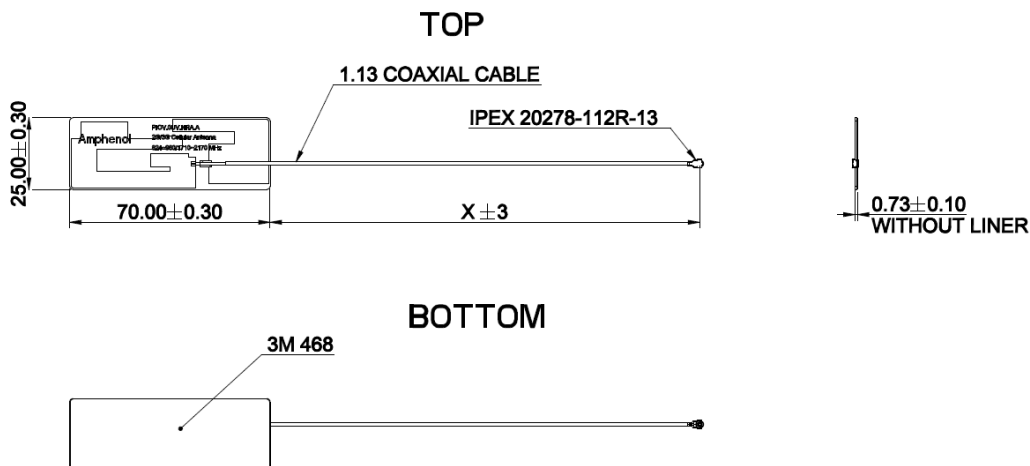


Consumer Electronics



Smart home

Product Drawing



Specifications

Band (MHz)	824	960	1710	2170
Return loss (dB)	-6.5	-5.8	-6.8	-11.2
Efficiency	47%	50%	46%	65%
Peak gain (dBi)	1.4	-0.2	1.5	2.5
VSWR	≤3			
Impedance	50 ohms			
Polarization	Linear			
Radiation Pattern	Omni-directional			
Test environment	Antenna in free space			
Power handled	5W			
Dimensions	70*25*0.8mm			
Operation temperature	-40°C ~ +85°C			
Storage temperature	-40°C ~ +85°C			
Weight	2.9 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 (MHz)	Peak gain (dBi)	Total efficiency
PIOV.OUV.NRA.A-050	50	824	1.5	48%
		960	-0.1	52%
		1710	1.7	48%
		2170	2.8	69%
PIOV.OUV.NRA.A-100	100	824	1.5	48%
		960	-0.1	51%
		1710	1.6	47%
		2170	2.7	67%
PIOV.OUV.NRA.A-150	150	824	1.4	47%
		960	-0.2	50%
		1710	1.5	46%
		2170	2.5	65%
PIOV.OUV.NRA.A-200	200	824	1.3	46%
		960	-0.3	49%
		1710	1.4	45%
		2170	2.3	63%