# **Cellular Antennas**

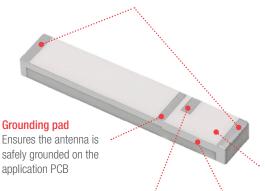


Cellular 790 to 2700 MHz antenna augments antenna product line to provide extended cellular bands spanning 698 to 2700 MHz for IoT applications

# **Features and Benefits**

# Fixing pads

Firmly anchor the antenna housing onto the SMT pads of the PCB



790 to 2700 MHz Cellular Ceramic Antenna (Series 204774)

# Feeding pad

Ensures electrical signals form a 50-0hm transmission line on the PCB is fed into the antenna

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### **Grounding pad**

Ensures the antenna is safely grounded on the application PCB

# Ceramic antenna housing

High thermal conduction and resistance against detuning effects of environmental interference

### Antenna radiator

Yields consistent RF performance including high peak gain and total radiation efficiencies

Fixing pads

Full LTE SMT Cellular Ceramic Antenna (Series 146200)

Firmly anchor antenna housing onto the SMT pad of the PCB

# Balanced transmission design

Minimizes ground-plane effects and significantly cuts costs and engineering resources needed for additional circuitry, frequency tuning and electronic component integration

# 100, 150 and 200mm micro-

Extend connectivity for maximum

# Poly-flexible, doublesided adhesive tape

Enables easy peel-and-stick mounting anywhere within the device casing

150, 200, 250, 300mm) Ensures maximum design flexibility in meeting connectivity needs

6 micro-coaxial cable

length options (50, 100,

The series 146185 Combo Cellular/Wi-Fi Antenna offers balanced transmission throughout the entire connection regardless of cable length

# coaxial cable options

design flexibility

The series 105263 Multi(6)band flexible antenna offers total average efficiency of 80% at the low band (GSM850, GSM900) and 70% at the high band (GSM1800, GSM1900 and LTE band-7)

# **Applications**

## **Connected Home**

Security and Surveillance

Home Automation

Home Streaming Entertainment

**Smart Appliances** 

**Energy and Utilities** 

# Wireless Infrastructure

Wireless Solutions

Telecommunications/Networking

Infrastructure/Networking

**Commercial Vehicles** 

Networking



Connected Home

# **Cellular Antennas**



# **Specifications**

# REFERENCE INFORMATION

Packaging: Tape on reel (204774, 146200)

PE film (146185) Tray (105263) Reference Platform:

> 130.00 by 60.00 by 0.80mm PCB (204774) 130.00 by 60.00 by 1.00mm PCB (146200)

Designed In: Millimeters

RoHS: Yes Halogen Free: Yes Ground clearance:

Refer to Application Specifications

### **ELECTRICAL**

Voltage (Watt): 2 Return Loss - S11(dB):

Refer to Product and Application Specifications Average Total Radiation Efficiency(%):

Refer to Product and Application Specifications Peak Gain (dBi):

Refer to Product and Application Specifications

Polarization: Linear Input Impedance (Ohms): 50

### **MECHANICAL**

Shear Force: 20N min. (204774) 50N min. (146200)

Cable Pull Test: 8.0N min. (146185)

5.0N min. (105263)

# **PHYSICAL**

Housing: Ceramic (204774, 146200) Plating: Silver 8-10µm (204774, 146200) Flexible Material Thickness: 0.11mm (146185) 0.10mm (105263)

Operating Temperature: -40 to 125°C (204774)

-40 to 85°C (146200, 105263)

-30 to 85°C (146185)

# **Ordering Information**

Series No.	Description	Frequency Bands	Dimensions
<u>204774</u>	Cellular 970 to 2700 MHz Ceramic Antenna	790 to 960 MHz and 1.7 to 2.7 GHz	33.00 by 6.00 by 3.00mm
146200	Full LTE SMT Ceramic Antenna	698 to 960; 1.7 to 2.70 GHz	40.00 by 5.00 by 5.00mm
<u>146185</u>	Combo Cellular/Wi-Fi Flexible Antenna	824 to 960 MHz;	- 84.00 by 15.00mm
		1.71 to 2.7 GHz and 3 to 6 GHz	
<u>105263</u>	Multi(6)-band Flexible Antenna	824 to 960 MHz;	- 106.60 by 13.00mm
		1.71 to 2.7 GHz	