

## 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

**Feeding pad**  
Ensures electrical signals form a 50-Ohm transmission line on the PCB is fed into the antenna

**Grounding pad**  
Ensures the antenna is safely grounded on the application PCB

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**790 to 2700 MHz Cellular Ceramic Antenna (Series 204774)**

**Feeding pad**  
Ensures electrical signals form a 50-Ohm transmission line on the PCB is fed into the antenna

**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

**Full LTE SMT Cellular Ceramic Antenna (Series 146200)**

**Fixing pads**  
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

**Poly-flexible, double-sided adhesive tape**  
Enables easy peel-and-stick mounting anywhere within the device casing

**6 micro-coaxial cable length options (50, 100, 150, 200, 250, 300mm)**  
Ensures maximum design flexibility in meeting connectivity needs

**100, 150 and 200mm micro-coaxial cable options**  
Extend connectivity for maximum design flexibility

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

*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

## 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
<a href="#">204774</a>	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
<a href="#">146200</a>	Full LTE SMT Ceramic Antenna	698 to 960; 1.7 to 2.7 GHz	40.00 by 5.00 by 5.00mm
<a href="#">146185</a>	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	
<a href="#">105263</a>	Multi(6)-band Flexible Antenna	824 to 960 MHz;	106.60 by 13.00mm
		1.71 to 2.7 GHz	

[www.molex.com/link/standard\\_antennas.html](http://www.molex.com/link/standard_antennas.html)