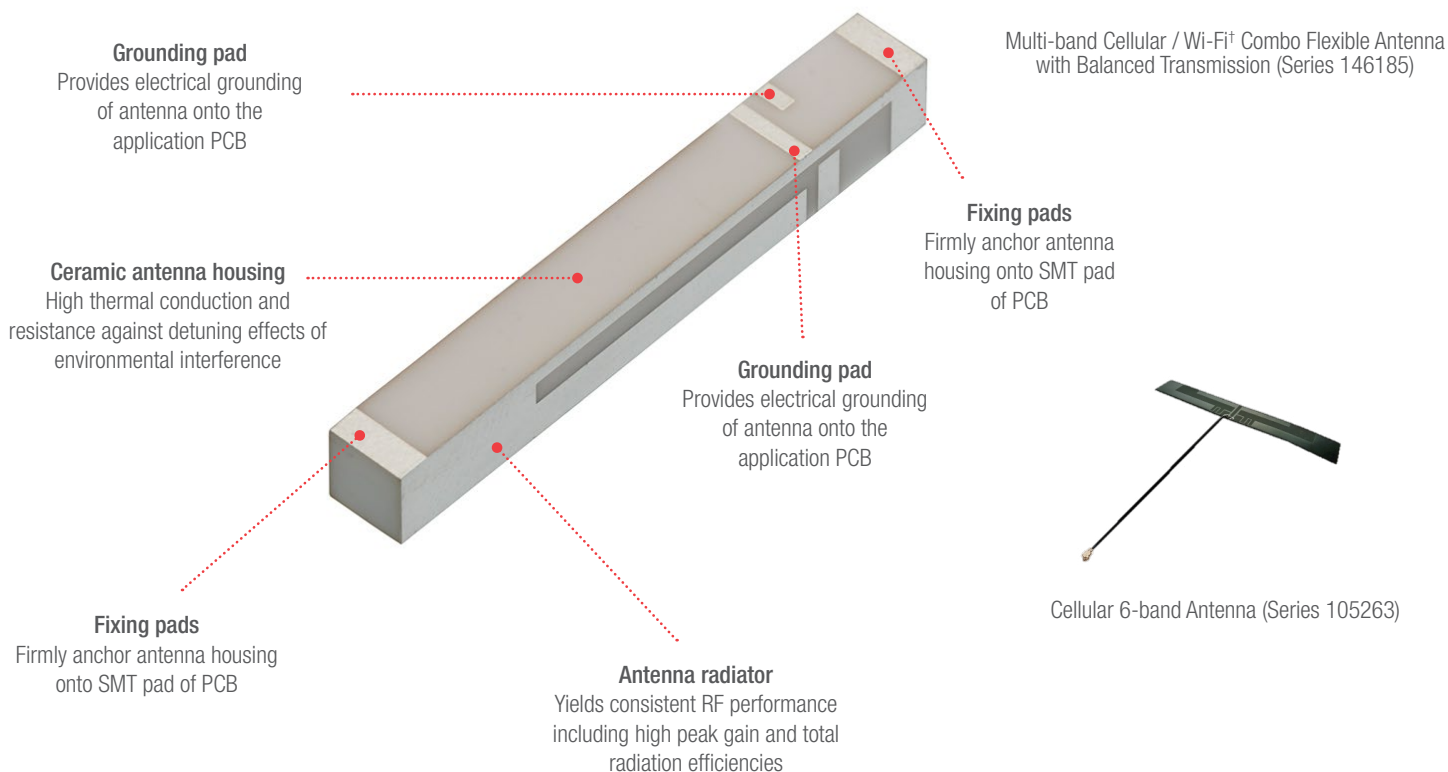


Cellular Antennas



Extending the cellular antenna product line, the full LTE* SMT antennas enable higher speed wireless deployments in advancing 4G technology

Features and Advantages



Measuring 40.00 by 5.00 by 5.00mm this compact SMT antenna (series 146200) requires only a small clearance area of 5.00mm by 5.00mm around the footprint perimeter of the antenna

Applications

Data/Telecommunications/Networking

- Infrastructure
- Networking equipment

Industrial

- Smart grid concentrators
- Smart meters
- Home energy displays
- Remote sensors
- Alarm and monitoring equipment
- Vending machine
- Payment devices

Smart Phone and Mobile Devices

- Mobile phones and tablet PCs

Consumer (CE)

- Mobile gaming devices
- Personal navigation devices
- Wireless internet TV and audio devices

Automotive

- Asset tracking devices
- Infotainment



Data Centers

*LTE – acronym for Long-Term Evolution, is a standard for high-speed wireless mobile and data terminal communication developed by the 3GPP (3rd Generation Partnership Project) - a collaboration between groups of telecommunications associations

*Wi-Fi is a registered trademark of the Wi-Fi Alliance

Specifications (LTE SMT Cellular Antenna)

REFERENCE INFORMATION

Packaging: Tape on reel
 Reference Platform: 130.00 by 60.00 by 1.00mm
 Designed In: Millimeters
 RoHS: Yes
 Halogen Free: Yes
 Ground clearance: 5.00 by 5.00mm
 SMT compatible: Yes

ELECTRICAL

Voltage (Watt): 2
 Return Loss - S11(dB): <-5
 Average Total Radiation Efficiency(%): > 60; 70
 Peak Gain (dBi): 1.1; 4.5
 Polarization: Linear
 Input Impedance (Ohms): 50

MECHANICAL

Peeling Force: 8N min.

PHYSICAL

Housing: Ceramic
 Plating: Silver 8-10µm
 Operating Temperature: -40 to +85°C

SPECIFICATIONS (Multi-band Cellular/Wi-Fi Combo Flex Antenna with Balanced Transmission)

REFERENCE INFORMATION

Packaging: PE film
 Mates With: Surface-mount, micro-coaxial jack
 (Part Number: 73412-0110)
 Designed In: mm
 RoHS: Yes
 Halogen Free: Yes
 Glow Wire Compliant: No

ELECTRICAL (LOW BAND)

f_start (MHz): 824
 f_end (MHz): 960
 For Return Loss S11, Total Radiation Efficiency and Peak Gain: Refer to Product and Application Specifications
 Polarization: Linear
 Input Impedance (Ohms): 50

ELECTRICAL (HIGH BAND)

f_start (MHz): 1710
 f_end (MHz): 6000
 For Return Loss S11, Total Radiation Efficiency and Peak Gain: Refer to Product and Application Specifications
 Polarization: Linear
 Input Impedance (Ohms): 50

MECHANICAL

Cable Pull Force: 18.0N min.

PHYSICAL

Thickness: 0.10mm
 Operating Temperature: -30 to +85°C

SPECIFICATIONS (Cellular 6-Band Antenna)

REFERENCE INFORMATION

Packaging: Tray
 Mates With: Micro-coaxial SMT Jack (Part Number: 73412-0110)
 Use In: Any device that requires a compact and balanced transmission antenna
 Designed In: mm
 RoHS: Yes
 Halogen Free: Yes
 Glow Wire Compliant: No

ELECTRICAL

Frequency Band: 824 to 960 MHz; 1.71 to 2.7 GHz
 For Reflection IS111, Return Loss S11, Total Radiation Efficiency and Peak Gain: Refer to Product and Application Specifications
 Polarization: Linear
 Input Impedance (Ohms): 50
 Max PWR: 2W / 33 dBm

MECHANICAL

Cable Pull Force: 8.0N min.

PHYSICAL

Contact: Micro coaxial (<2.5mm mating height)
 PCB Thickness: 0.10mm
 Operating Temperature: -40 to +85°C

Ordering Information

Series No.	Description	Frequency Bands	Dimension(mm)
146200	Full LTE SMT Cellular Antenna	698 to 960; 1700 to 2700 MHz	40.00(L) by 5.00(W) by 5.00(H)
146185	Multi-band Cellular/Wi-Fi Combo Flex Antenna with Balanced Transmission	824 to 960 MHz; 1.71 to 2.7 GHz and 3 to 6 GHz	84.00 by 15.00
105263	Cellular 6-band Antenna	824 to 960 MHz; 1.71 to 2.7 GHz	106.60 by 13.00

www.molex.com/link/standard_antennas.html