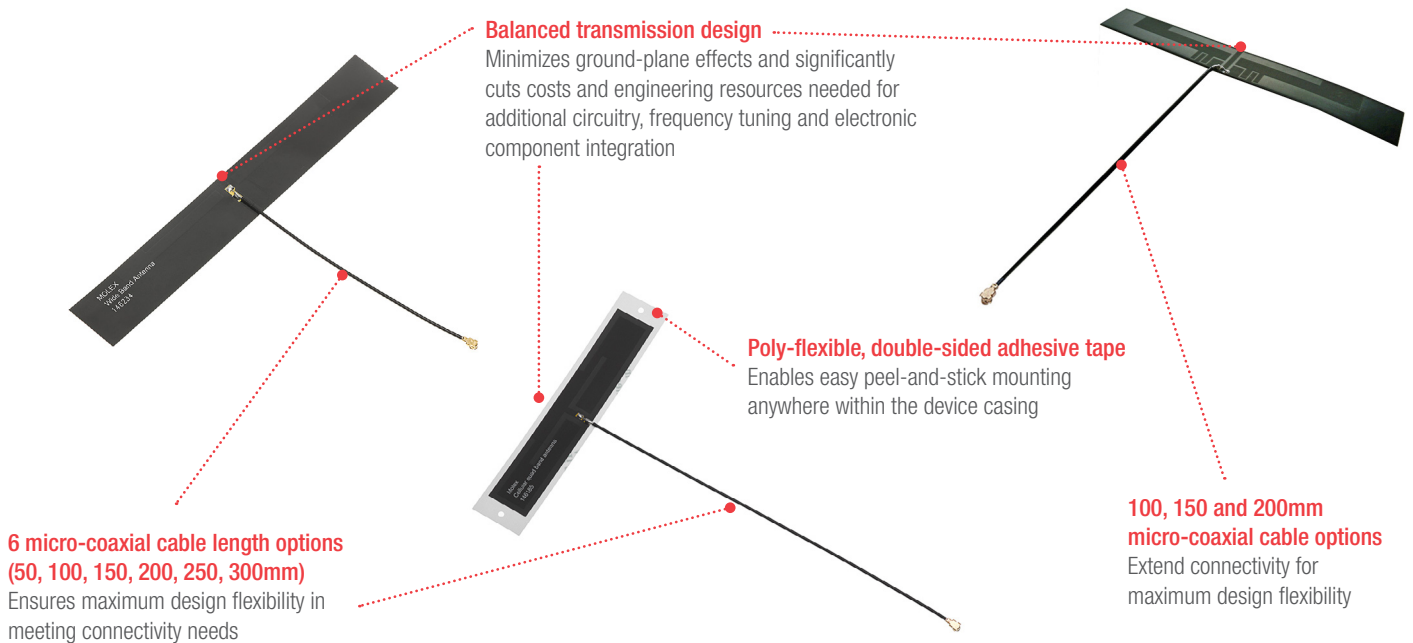


# Cellular Flexible Antennas



**Wide-band antenna future-proofs wireless application developments to support evolving LTE and 4G cellular technologies**

## Features and Benefits



## Applications

### Telecommunications/Networking

Infrastructure/Networking

### Industrial Automation

- Smart grid concentrators
- Smart meters
- Home energy displays
- Remote sensors
- Alarm and monitoring systems

### Consumer

- Home entertainment
- Home office



Networking Servers



Alarm and Monitoring Systems



Home Entertainment Systems

## Specifications

**Wide-band 698 to 960 MHz / 1.5 to 2.7 and 2.7 to 6 GHz Flexible Antenna 146234**

### REFERENCE INFORMATION

Packaging: PET film  
Reference Platform (Ground size): 120 by 120 mm  
PCB  
Designed In: Millimeters  
RoHS: Yes  
Halogen Free: Yes  
Ground clearance: Refer to Application Specification

### ELECTRICAL

Voltage (Watt): 2  
Return Loss - S11(dB): <-4 (698 to 960MHz); <-5 (1.5 to 2.7 and 2.7 to 6 GHz)  
Average Total Radiation Efficiency(%): Refer to Product Specification as these vary with cable lengths for each of the 3 bands  
Peak Gain (dBi): Refer to Product Specification  
Polarization: Linear  
Input Impedance (Ohms): 50

### MECHANICAL

Pull Force: >8N min.

### PHYSICAL

Thickness: 0.10mm (Flexible Material)  
Operating Temperature: -30 to 85°C

## Specifications

### Cellular Quad-band Flexible Antenna, Series 146185

#### REFERENCE INFORMATION

Packaging: PET 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

Voltage (Watt): 2  
 Return Loss - S11(dB): <-4  
 Average Total Radiation Efficiency(%): >60  
 (824 to 960 MHz); >65 (1.7 to 2.7 GHz)  
 Peak Gain (dBi): 1.4 (824 to 960 MHz); 3.0  
 (1.7 to 2.7 GHz)  
 Polarization: Linear  
 Input Impedance (Ohms): 50

#### MECHANICAL

Cable Pull Test: 8.0N min.

#### PHYSICAL

Thickness: 0.10mm (Flexible Material)  
 Operating Temperature: -30 to 85°C

### Multi(6)-Band Flexible Antenna, Series 105263

#### 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

Voltage (Watt): 2  
 Return Loss - S11(dB): <-6  
 Average Total Radiation Efficiency(%): >66  
 (824 to 960 MHz); >60 (1.71 to 2.70 GHz)  
 Peak Gain (dBi): 2.3 (824 to 960 MHz); 3.1  
 (1.7 to 2.7 GHz)

#### MECHANICAL

Cable Pull Force: 5.0N min.

#### PHYSICAL

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

### 824 to 960 / 1710 to 2170 MHz Cellular Flexible Antenna, Series 207235

#### REFERENCE INFORMATION

Packaging: PET film  
 Use In: Any device that requires a compact and  
 balanced transmission antenna  
 Designed In: mm  
 RoHS: Yes  
 Halogen Free: No  
 Glow Wire Compliant: No

#### ELECTRICAL

Voltage (Watt): 2  
 Return Loss - S11(dB): Refer to Product  
 Specification as these vary with cable lengths for  
 each band  
 Average Total Radiation Efficiency(%): Refer to

Product Specification

Peak Gain (dBi): Refer to Product Specification

#### MECHANICAL

Cable Pull Force: 8.0N min.  
 Un-mating force (min.): 8N (initial), 5N (after 30 cycles)

### 600 to 960 / 1500 to 3000 / 3000 to 6000 MHz Flexible Antenna, Series 207901

#### REFERENCE INFORMATION

Packaging: PET film  
 Reference Platform (Ground Size):  
 140 by 25 mm PCB  
 Designed In: mm  
 RoHS: Yes  
 Halogen Free: No  
 Glow Wire Compliant: No

#### ELECTRICAL

Voltage (Watt): 2  
 Return Loss - S11(dB): <5dB  
 Average Total Radiation Efficiency(%): Refer to  
 Product Specification  
 Peak Gain (dBi): Refer to Product Specification

#### MECHANICAL

Cable Pull Force: 8.0N min.  
 Un-mating force (min.): 8N (initial), 5N  
 (after 30 cycles)

#### PHYSICAL

Cable Outer Diameter (mm): 1.13  
 Operating Temperature: -40 to 85°C

## Ordering Information

Series No.	Description	Frequency Bands	Dimension (mm)
<a href="#">146234</a>	Wide-band Cellular Flexible Antenna	698 to 960 MHz / 1.5 to 6 and 2.7 to 6 GHz	140.00 by 20.00 by 0.10
<a href="#">146185</a>	Cellular Quad-band Flexible Antenna	824 to 960 MHz; 1.71 to 2.7 GHz and 3 to 6 GHz	84.00 by 15.00 by 0.10
<a href="#">105263</a>	Multi(6)-band Flexible Antenna	824 to 960 MHz; 1.71 to 2.7 GHz	106.60 by 13.00 by 0.10
<a href="#">207235</a>	Cellular Flexible Antenna	824 to 960MHz; 1.71 to 2.17GHz	40.40 by 15.40 by 0.10
<a href="#">207901</a>	Flexible Antenna	600 to 960MHz; 1.50 to 3GHz; 3 to 6GHz	147.00 by 25.00 by 0.16

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