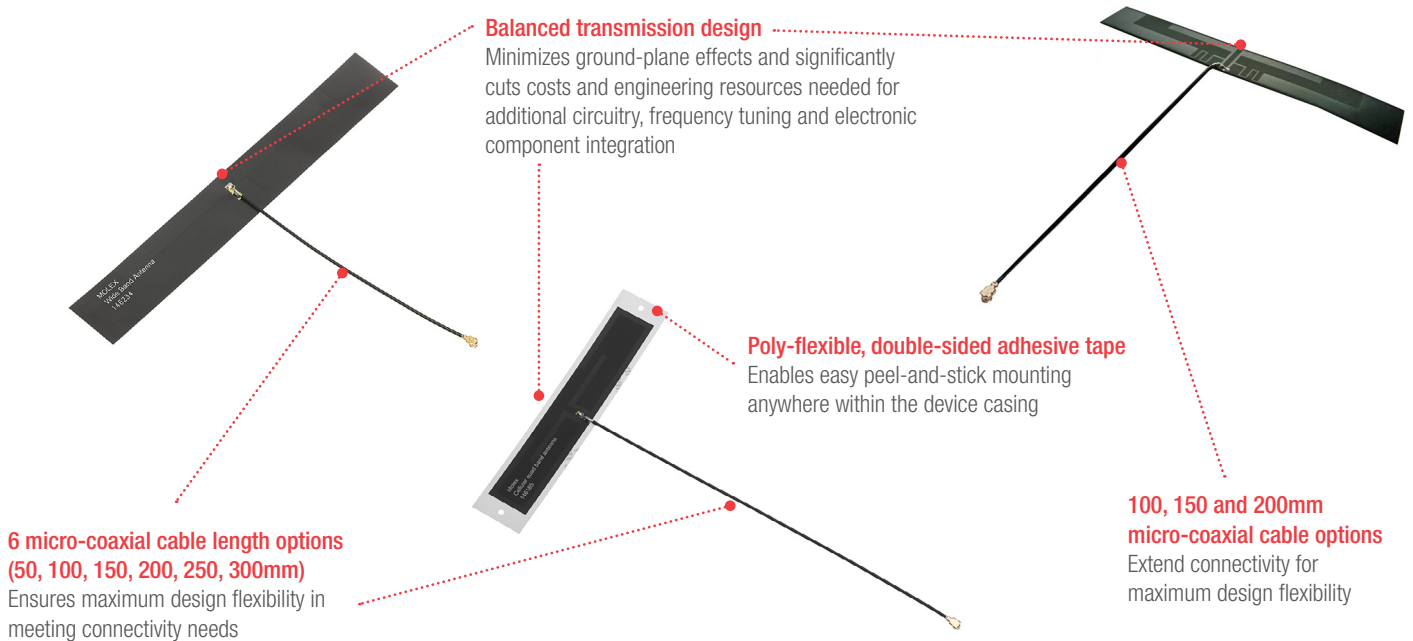


Cellular Flexible Antennas



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

(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)

PHYSICAL

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

Ordering Information

Series No.	Description	Frequency Bands	Dimension (mm)
146234	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
146185	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
105263	Multi(6)-band Flexible Antenna	824 to 960 MHz; 1.71 to 2.7 GHz	106.60 by 13.00 by 0.10
207235	Cellular Flexible Antenna	824 to 960MHz; 1.71 to 2.17GHz	40.40 by 15.40 by 0.10

www.molex.com/link/standard_antennas.html