

## Unlicensed Transmitters: Approved Antennas List

<i>Manufacturer</i>	<i>Antenna</i>	<i>Description</i>	<i>Type</i>	<i>Peak Gain (dBi)</i>	<i>Min Cable loss (dB)</i>	$\Omega$	<i>Connector Type</i>	<i>Notes</i>
Molex	146153-0050	Flexible adhesive backed PCB antenna	Dipole	3.2	NA	50	u.fl	1

<i>Manufacturer</i>	<i>Antenna</i>	<i>Description</i>	<i>Type</i>	<i>Length (mm)</i>	<i>Width (mm)</i>	<i>Other Info</i>	<i>Connector Type</i>	<i>Notes</i>
Molex	1462362111	Rectangular Near Field Communication (NFC) Antenna, with Ferrite	Loop	23	27.3		Molex Micro-Lock Plus	2

**Notes:**

- 1) Antenna used for compliance testing.
- 2) RFID passive tag antenna (no active transmit)

Part Number : 1461530050

Series Number : 146153

Product Category : Antennas

Product Description : Wi-Fi 6E Flex Cabled  
Balanced Antenna, 9.00mm Width, 50.00mm  
Cable Length, Compatible with U.FL / I-PEX  
MHF Connectors

Status : Active

## Documents & Resources

### Drawings

Drawing 1461530050\_sd.pdf

Packaging Design Drawing 1461530100-000.pdf

### 3D Models and Design Files

3D Model 1461530050\_stp.zip

### Specifications

Application Specification AS-146153-100-001.pdf

Product Specification PS-146153-100-001.pdf

## Product Environment Compliance

### Compliance

GADSL/IMDS	Not Relevant
China RoHS	
EU ELV	Not Relevant
Low-Halogen Status	Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2023)8585-DC (23 Jan 2024)
EU RoHS	Compliant per EU 2015/863

### Multiple Part Product Compliance Statements

- Eu RoHS
- REACH SVHC
- Low-Halogen

### Multiple Part Industry Compliance Documents

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration

- IEC-62474
- chemSHERPA (xml)

## EU RoHS Certificate of Compliance

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### Part Details

#### General

Status	Active
Category	Antennas
Series	146153
Description	Wi-Fi 6E Flex Cabled Balanced Antenna, 9.00mm Width, 50.00mm Cable Length, Compatible with U.FL / I-PEX MHF Connectors
Component Type	Flexible Antenna with Cable
Function	Signal
Product Family	Internet of Things (IoT) Antennas: Wi-Fi, Bluetooth, Zigbee
Product Name	2.4/5GHz Balanced Flex Antenna
Protocol	BLE, BT, Thread, Wi-Fi, Wireless Hart, Zigbee
Type	Internal, Wi-Fi Antenna
UPC	889056310000

#### Electrical

Band#1 F_End (MHz)	2483.5
Band#1 F_Start (MHz)	2400
Band#2 F_End (MHz)	5930
Band#2 F_Start (MHz)	4900
Electrical Connectivity	Cable
Peak Gain (dBi)	3.2 @ 2.4 GHz, 4.25 @ 5 GHz
Return Loss - S11 (dB)	< -10
Total Efficiency	>78% @2.4 GHz, >79% @ 5 GHz

#### Physical

Cable Length	50.00mm
Length	34.90mm
Mounting Style	Adhesive

Net Weight	0.380/g
Packaging Type	PET Film
Polarization	Linear
Radiation Pattern	Omnidirectional
Thickness	0.10mm
Width	9.00mm

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## Mates With / Use With

### Mates with Part(s)

Description	Part Number
50 Ohms, MCRF, PCB Vertical Jack Receptacle, SMT, 1.25mm Mounted Height	<u>734120110</u>

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This document was generated on Jun 10, 2024