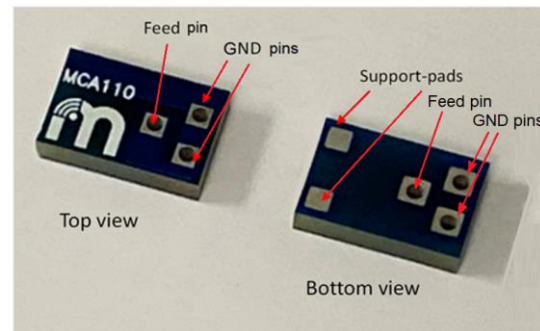


Wi-Fi 6E SMT Chip Antenna 5925 – 7125 MHz++ +

Dimensions and Package View

Package Size:

11 mm x 7.25 mm x 3.0 mm



Applications

- Access Points
- Routers
- Gateways
- Set-Top Box
- Appliances
- Other wireless devices

Key Features

- Frequency Range: 5.925 to 7.125 GHz
- Wi-Fi 6E Surface Mount Chip Antenna
- Feed trace Impedance: 50 Ω
- Wide Radiation Pattern and Coverage
- Realized Peak Gain: +3.2 to +4.53 dBi
- Return Loss: < -10 dB
- Average Total Efficiency: > 75 %
- Small Dimension and Low Profile

Description

The MCA110 is an SMT antenna for Wi-Fi 6E applications. It covers the new Wi-Fi operating frequency band of 5.925 to 7.125 GHz. The antenna has a wide radiation pattern that allows maximum coverage and makes this product an effective surface mount solution for Wi-Fi 6E devices. The high total efficiency of the MCA110 extends battery life as it utilizes less power to cover the same distance. With its small form factor and low profile, the MCA110 is the ideal cost-effective chip antenna for the design of a large variety of Wi-Fi 6E end products.

Specifications and Measured Performance (typ.)

Parameter	f Min	f	f Max
Frequency	5.925 GHz	6.525 GHz	7.125 GHz
Peak Gain	+ 3.2 dBi	+ 4.27 dBi	+ 4.53 dBi
Total Efficiency	74.2 %	78.9 %	70.3 %
Return Loss	- 11 dB	- 12 dB	- 11 dB
Power Handling	33 dBm		
Feed Trace Impedance	50 Ω		
Dimensions L x W x H	11 mm x 7.25 mm x 3.0 mm		
Operating Humidity, non-condensing	0 % to 95 %		
Storage Humidity, non-condensing	0 % to 95 %		
Operating Temperature	- 40°C (- 40° F) to + 75° C (+ 167° F)		
Storage Temperature	- 40°C (- 40° F) to + 85° C (+ 185° F)		

Typical Performance versus frequency at 25°C

Frequency	Peak Realized Gain	Directivity	Total Efficiency
GHz	dBi	dB	%
5.925	3.2	4.52	74.2
6.2	3.85	4.86	79.2
6.525	4.27	5.3	78.9
6.8	4.47	5.53	78.2
7.125	4.53	6.06	70.3
Average	4.06	5.25	76.1