

**JINDASIGNAL**www.jindasignal.com**Product Name: RF duplexer 889-915/934-960/1710-1780/1805-1875/1925-1980/2110-2170 MHz****Product Model: DUP1821-09-A**

The RF cavity duplexer is a key passive device in wireless communication systems, used to separate or combine RF signals of different frequency bands, enabling isolation between transmit and receive channels and efficient signal transmission. Its primary function is to ensure that transmitted and received signals do not interfere with each other while sharing the same antenna, thereby enhancing the overall performance and reliability of the communication system. The RF cavity duplexer offers excellent performance in terms of low intermodulation (PIM), low insertion loss, and high rejection, making it suitable for wireless network optimization, In-Building Distribution Systems (IBS), Base Transceiver Stations (BTS), Distributed Antenna Systems (DAS), and Antenna Feeder System (AFS).

Product Description

- Frequency covers
889-915/934-960/1710-1780/1805-1875/1925-1980/2110-2170 MHz
- Low insertion loss
- High rejection
- Suitable for indoor applications

**Specifications**

	FDD1.8GHz	FDD2.1GHz	GSM900MHz			
Frequency	1710-1780MHz	1805-1875MHz	1925-1980MHz	2110-2170MHz		
Insertion Loss@ normal temperature	≤1.8dB	≤1.9dB	≤1.8dB	≤1.8dB		
Insertion Loss @ high or low temperature	≤2.0dB	≤2.2dB	≤2.0dB	≤2.0dB		
Ripple	≤1.4dB	≤1.4dB	≤1.4dB	≤1.4dB		
Rejection	≥70dB@ DC-1645 ≥30dB@ 1645-1700 ≥50dB@1790-1805 ≥80dB@1805-1880 ≥70dB@1880-3000	≥70dB@ DC-1710 ≥90dB@ 1710-1780 ≥25dB@ 1780-1795 ≥45dB@1885-1925 ≥90dB@1925-3000	≥70dB@ DC-1875 ≥50dB@ 1875-1915 ≥30dB@2010-2110 ≥80dB@2110-2170 ≥70dB@2170-3000	≥70dB@ DC-1925 ≥95dB@ 1925-1980 ≥30dB@ 1980-2080 ≥30dB@2200-2230 ≥70dB@2230-3000	≥70dB@ DC-850 ≥10dB@850-880 ≥80dB@934-960 ≥70dB@960-3000 ≥70dB@2230-3000	≥70dB@ DC-889 ≥95dB@889-915 ≥10dB@970-1000 ≥70dB@1000-3000
Return Loss			≥18 dB			
VSWR			≤1.3			
Inter-modulation IM3			≤-145dBc FOR (2x43 dBm)			
Power			50W CW			
Impedance			50Ω			
Net Weight			≤1.59kg			

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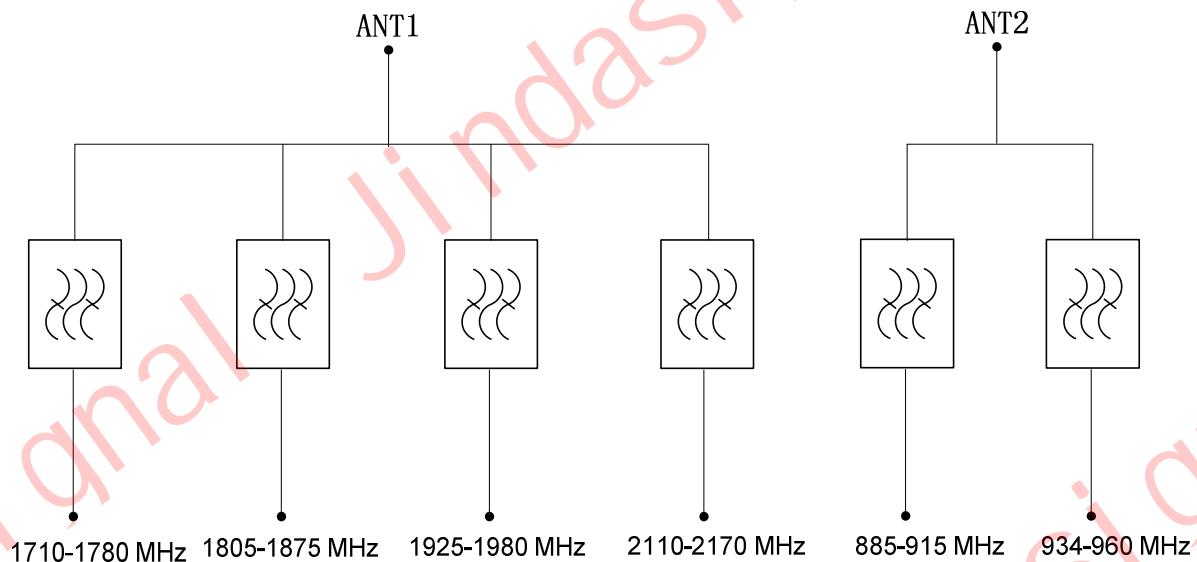


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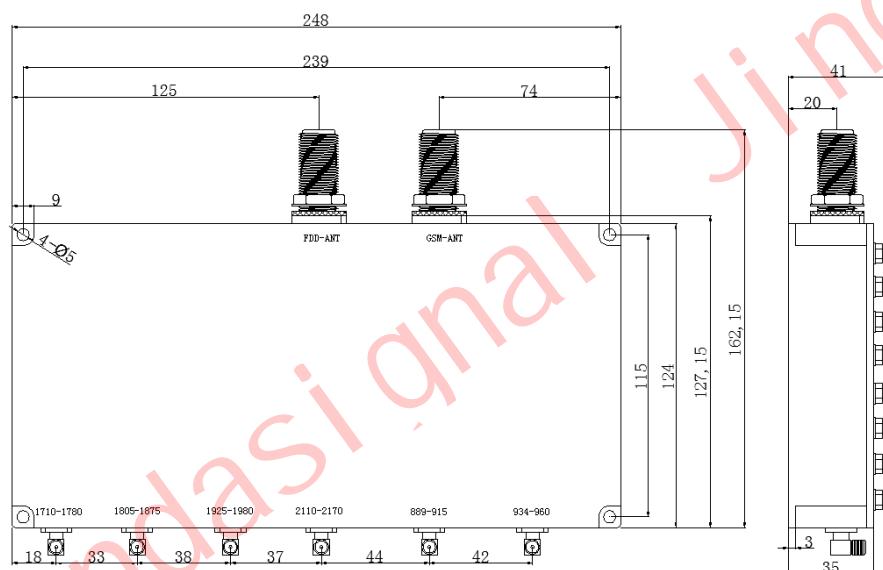
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Dimensions (exclude connectors)	248 x 124 x 41mm /9.76x4.88x1.61 inch
Operating temperature	-30°C to +65°C
RF connector	Input: SMA Right-Angle Female Output: N Female
Relative humidity	0~95%
Color	Silver-plated
RoHS	Comply with RoHS
Ingress protection	IP52

Block Diagram



Outline Drawing



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