



JINDASIGNAL

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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	889-915MHz	934-960MHz
Insertion Loss@ normal temperature	≤1.8dB	≤1.9dB	≤1.8dB	≤1.8dB	≤1.6dB	≤2.0dB
Insertion Loss @ high or low temperature	≤2.0dB	≤2.2dB	≤2.0dB	≤2.0dB	≤1.7dB	≤2.3dB
Ripple	≤1.4dB	≤1.4dB	≤1.4dB	≤1.2dB	≤1.4dB	≤1.3dB
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@ 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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Dimensions

248 x 124 x 41mm /9.76x4.88x1.61 inch

(exclude connectors)

Operating temperature

-30°C to +65°C

RF connector

Input: SMA Right-Angle Female

Output: N Female

Relative humidity

0~95%

Color

Silver-plated

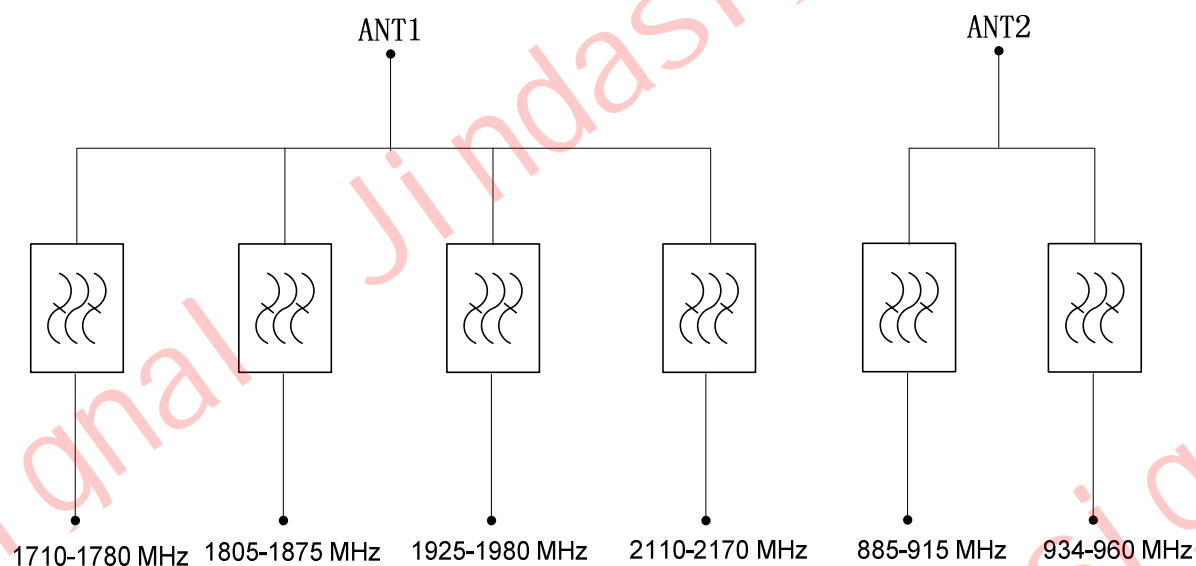
RoHS

Comply with RoHS

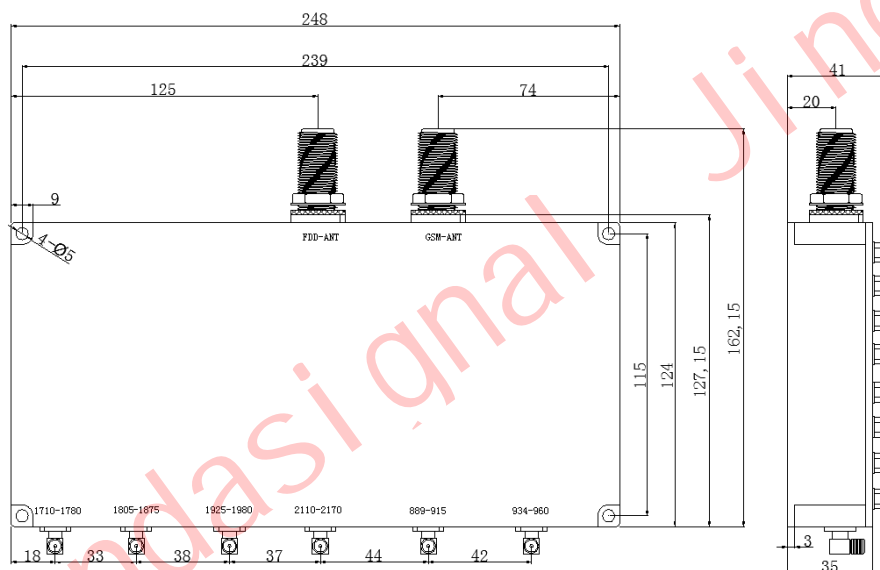
Ingress protection

IP52

Block Diagram



Outline Drawing



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