

## **FDCDW6DUP002 2.4-2.5GHz&5.15-7.125GHz Diplexer**

### **Features**

- 2.4-2.5GHz&5.15-7.125GHz Dual-Band
- New circuit topology for excellent return loss and high out of band rejection
- Novel Transmission zero control technology to enhance out-of-band rejection
- Passive integration on High-Si

### **Applications**

- Wireless communication

### **Specification**

Description(Low Band)	Value
Pass Band	2400~2500MHz
Insertion Loss	0.65dB(Max)@25°C
Return Loss	19dB(Min)
Out of band rejection	25dB @4800-5000 MHz 29dB @5150-7125 MHz 23dB @7200-7500 MHz 29dB @10300-14250 MHz 28dB @15450-21375 MHz
Input/output Impedance	50Ω
Dimension (Die)	1.5mm×0.8mm×0.3mm
Operating Temperature Range	-40~+85°C

# Data Sheet -IPD



Description(High Band)	Value
Pass Band	5150~7125MHz
Insertion Loss	1.5dB(Max)@25°C
Return Loss	12dB(Min)
Out of band rejection	36dB @300-1000 MHz 35dB @1000-2300 MHz 41dB @2400-2500 MHz 16dB @2700-3500 MHz 31dB @10300-11900 MHz 31dB @11900-14250 MHz 25dB @15450-17850 MHz 12dB @17850-21375 MHz
Input/output Impedance	50Ω
Dimension (Die)	1.5mm×0.8mm×0.3mm
Operating Temperature Range	-40~+85°C

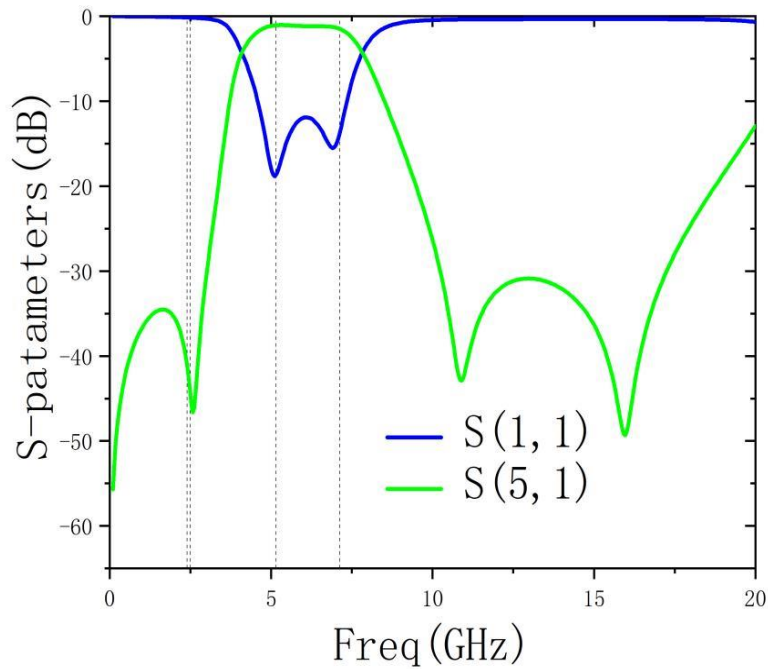
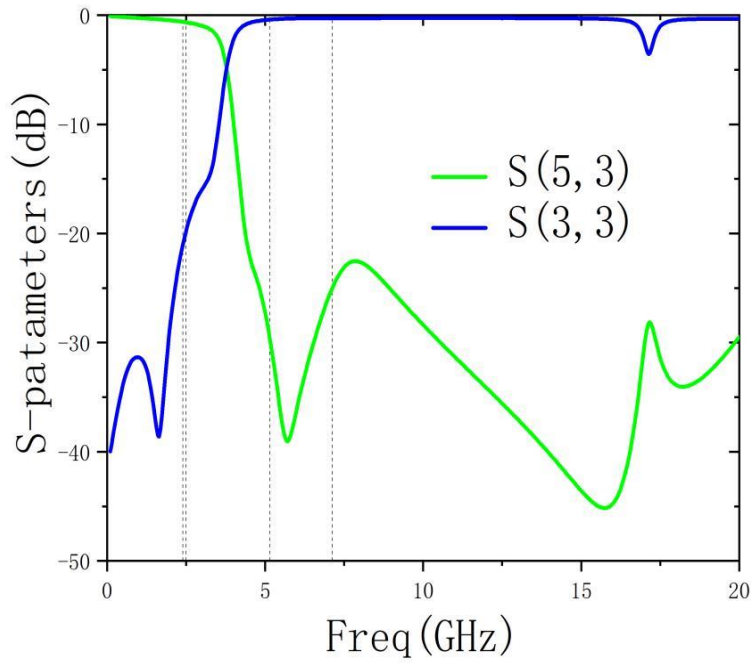
Description (Common)	Value
Return Loss	18dB @2400~2500 MHz 13dB @5150-7125 MHz
Input/output Impedance	50Ω
Dimension (Die)	1.5mm×0.8mm×0.3mm
Operating Temperature Range	-40~+85°C

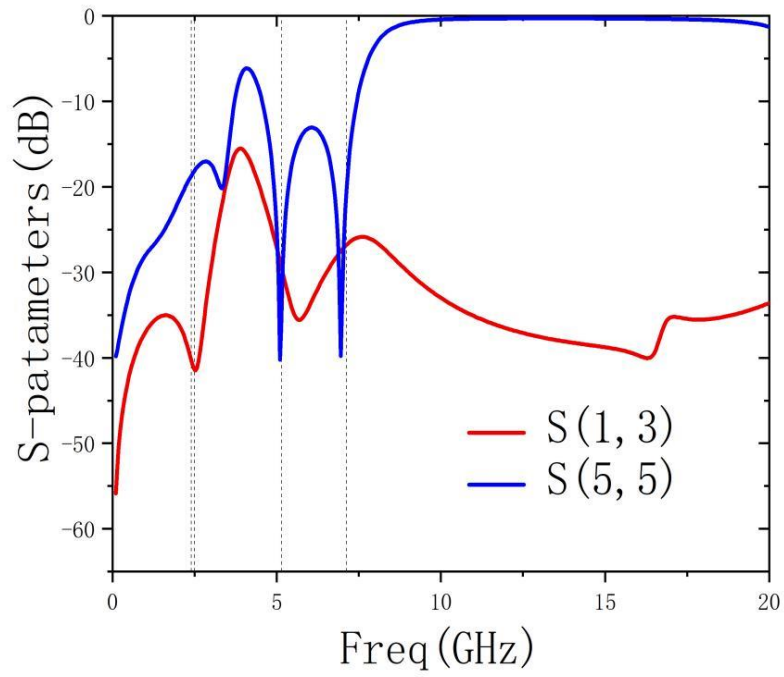
# Data Sheet -IPD



Description (Isolation)	Value
Isolation	24dB @4800-5000 MHz 27dB @5150-7125 MHz 26dB @7200-7500 MHz 33dB @10300-14250 MHz 34dB @15450-21375 MHz
Input/output Impedance	50Ω
Dimension (Die)	1.5mm×0.8mm×0.3mm
Operating Temperature Range	-40~+85°C

## Electrical Performance



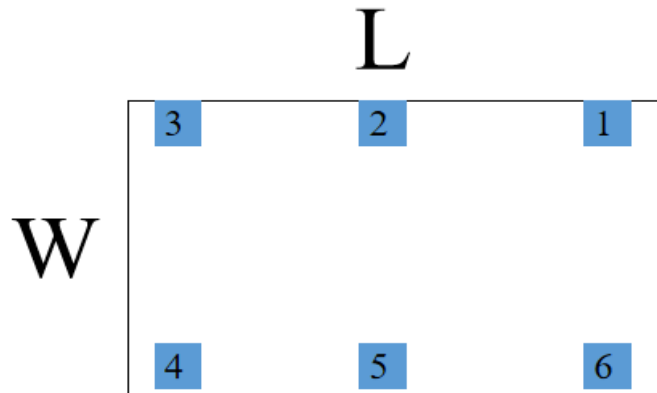


## Layout & Dimension

### Dimension

Max Length--L(mm)	1500
Max Width--W(mm)	800
Max Height--H(mm)	0.3
Package	FlipChip

### Top View



### PIN Description

PIN	Description
1	High Band(P1)
2	GND
3	Low Band(P2)
4	GND
5	Common(P3)
6	GND