# LDIP4175-1608-V11

## FR Diplexer

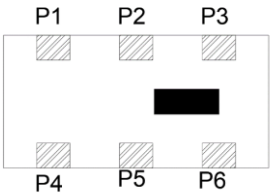
### Features

- Multilayer monolithic construction yields high reliability
- Low insertion loss and small size SMD chip design
- Can simplify your complex tuning and circuit design
- LTCC process

### Specifications

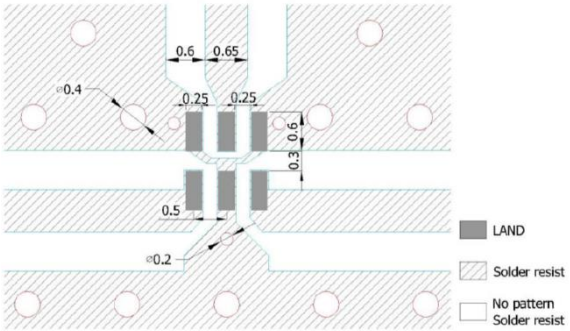
| NO. | Specification | | |
|---|---|---|---|
| 1 | Frequency range (MHz) | 2400~2500 | 5150~5850 |
| 2 | Insertion Loss (dB) @25℃ | 0.60 max | 1.50 max |
| 3 | VSWR | 2.0 max. | 2.0 max. |
| 4 | Impedance (Ω) | 50 | 50 |
| 5 | Attenuation | 23 dB min. @ 4800~5000 MHz | 25 dB min. @ 2400~2500 MHz |
| | | 30 dB min. @ 7200~7500MHz | 15 dB min. @ 3400~3600 MHz |
| | | - | 10 dB min. @ 3600~3900 MHz |
| | | - | 20 dB min. @ 6900~7550 MHz |
| | | - | 30 dB min. @ 10600~11700 MHz |
| | | - | 20 dB min. @ 15300~16200 MHz |
| **Operating & Storage Condition (Component)**<br>Operation Temperature Range: -40℃ ~ +85℃<br>Storage Temperature Range: -40℃~ +85℃ | | | |
| **Storage Condition before Soldering (Included packaging material)**<br>Storage Temperature Range: +5 ~ +40 ℃<br>Humidity: 30 to 70% relative humidity | | | |

### Construction




| PIN | Connection | PIN | Connection |
|---|---|---|---|
| P1 | GND | P4 | Low Port |
| P2 | Antenna Input | P5 | GND |
| P3 | GND | P6 | Higher Port |

### Mounting Considerations




Unit: mm
Line width to be designed to match 50 Ω characteristic impedance, depending on PCB material and thickness

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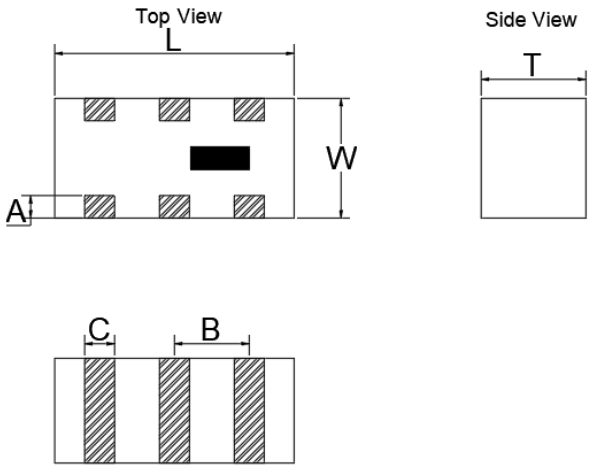
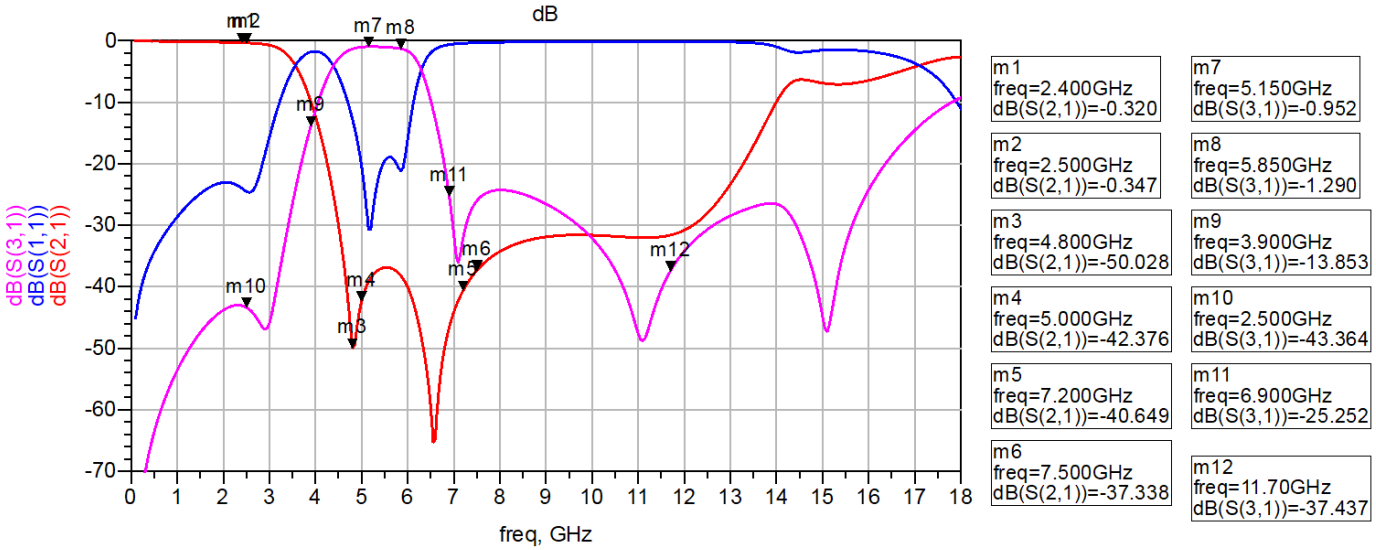
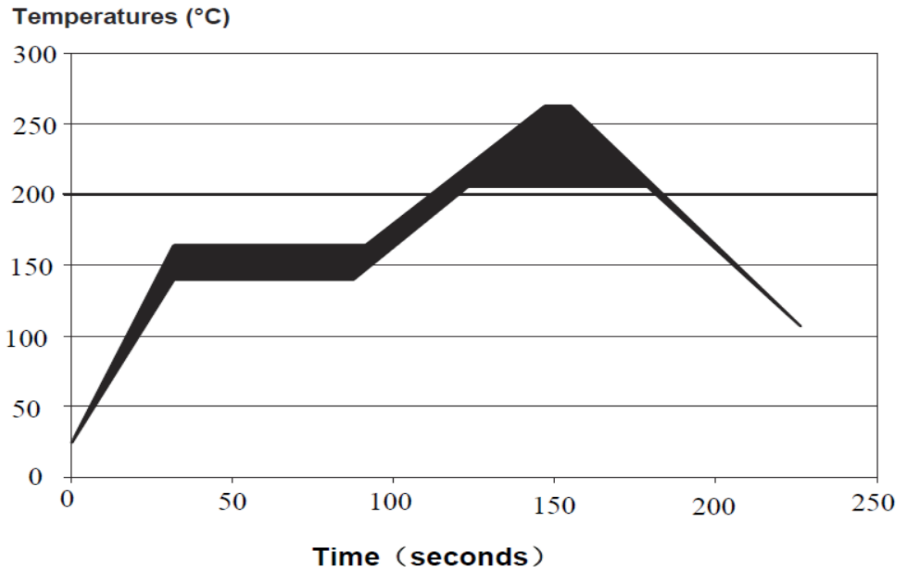
### Dimensions

| Figure | Symbol | Dimension (mm) |
|---|---|---|
|  | L | 1.6 ± 0.10 |
| | W | 0.8 ± 0.10 |
| | T | 0.6± 0.10 |
| | A | 0.2± 0.10 |
| | B | 0.5 ± 0.10 |
| | C | 0.25 ± 0.10 |

### Typical Electrical Characteristics (T=25°C)



## Solder Reflow Standard Conditioning




## Storage Conditions

**Temperature : +5 to +30 ℃**

**Humidity : 20 to 70% RH**

**Term of storage : Within 12 months (After the delivery)**

***Baking : Unnecessary**

*** After peeling off cover tape, do not keep exposing the products to the open air. For the products stored longer than 12 months, confirm their terminals and solderability before use.**