

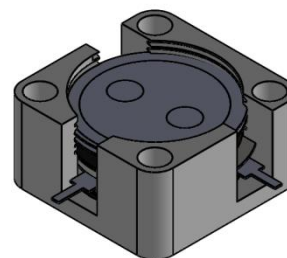


## DP3006C

### ENG PART:DP-12.7X12.7CD-3300T4200-CCW

3300MHz to4200MHz Single-Junction Drop-in Circulator

| REV. | DESCRIPTION        | REVISOR | DATE       | APPROVED |
|------|--------------------|---------|------------|----------|
| 1    | Creating datasheet | ZC.Wu   | 2024/01/09 | Nick     |

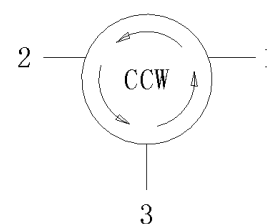


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 3300MHz to 4200MHz
- Operating temperature range: -40°C to +105°C
- Storage temperature range: -55°C to +135°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



### Electrical Specifications:

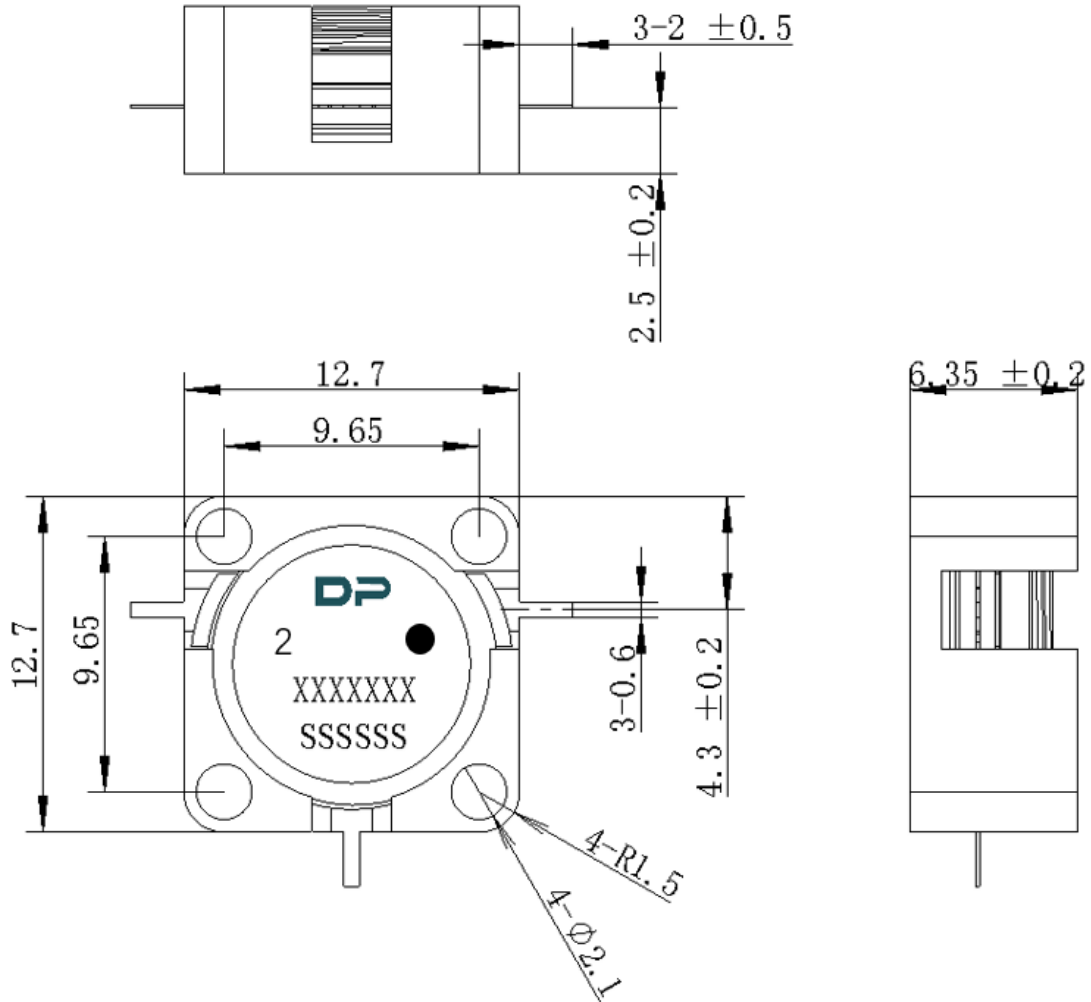
| ITEM                     | SPECIFICATION                          |          |
|--------------------------|--|----------|
| Frequency                | 3300-4200                              | MHz      |
| Direction                | CCW                                    |          |
| Impedance                | Typ: 50                                | $\Omega$ |
| Insertion Loss (Max.)    | 0.55@25°C $\pm$ 5°C<br>0.65@-40~+105°C | dB       |
| Isolation (Min.)         | 17.0@25°C $\pm$ 5°C<br>15.0@-40~+105°C | dB       |
| Return Loss (Min.)       | 17.0@25°C $\pm$ 5°C<br>15.0@-40~+105°C | dB       |
| 3rd IMD (Max.)           | -                                      | dBc      |
| 2nd harmonic suppression | -                                      | dBc      |
| 3rd harmonic suppression | -                                      | dBc      |
| Power FWD/REV/PEAK       | 60/-/500                               | W        |

Notes:

1. Exposure to maximum rating conditions for extended periods may reduce device reliability. There is no damage to device with only one parameter set at the limit and all other parameters set at or below their nominal value. Exceeding any of the limits listed here may result in permanent damage to the device.
2. Performance is guaranteed under the conditions listed in this table and over the operating temperature range.
3. Performance will not degrade by > 10% (Insertion loss > 20%) with an operating temperature of up to 130 °C.



### Mechanical Specifications:



Unit: Millimeters

#### Notes:

1. The housing is nickel plated and the circuit is silver-plated.
2. Tolerance  $\pm 0.2$ mm unless otherwise specified.
3. Co-planarity Specification: 0.1mm maximum.
4. The **XXXXXXX** on the label represents the part number
6. The **SSSSSS** on the label represents the serial number
7. The black dot on the label represents the input port