

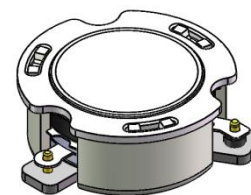


## DP3015C

### ENG PART:DP-15.5CM-703T748-CW

703MHz to 748MHz Single-Junction Surface Mount Circulator

| REV. | DESCRIPTION        | REVISOR | DATE       | APPROVED |
|------|--------------------|---------|------------|----------|
| A    | Creating datasheet | ZZ.Zhu  | 2024/1/31  | Nick     |
| B    | Updated the spec.  | ZZ.Zhu  | 2024/11/25 | Nick     |

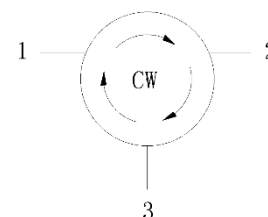


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 703MHz to 748MHz
- Operating temperature range: -40°C to +105°C
- Storage temperature range: -50°C to +135°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



**Electrical Specifications:**

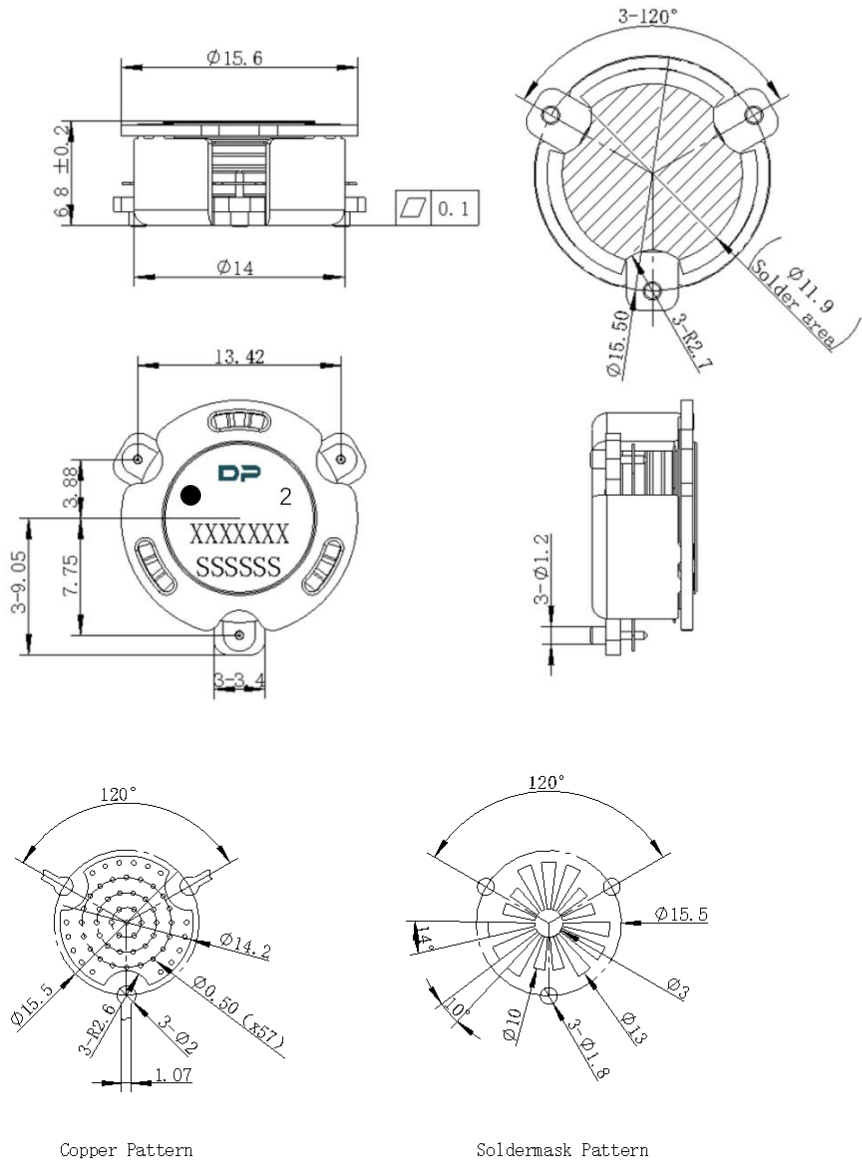
| ITEM                    | SPECIFICATION                 |          |
|-------------------------|-------------------------------|----------|
| Frequency               | 703~748                       | MHz      |
| Direction               | CW                            |          |
| Impedance               | Typ: 50                       | $\Omega$ |
| Insertion Loss (Max.)   | 0.40@+25°C<br>0.50@-40~+105°C | dB       |
| Isolation (Min.)        | 18@+25°C<br>16@-40~+105°C     | dB       |
| Return Loss (Min.)      | 18@+25°C<br>16@-40~+105°C     | dB       |
| 3rd IMD (Max.)          | -55@2x1W CW tones1MHz spacing | dBc      |
| 2nd harmonicattenuation |                               | dB       |
| 3rd harmonicattenuation |                               | dB       |
| Power FWD/REV/PEAK      | 60/60/500                     | W        |
| Termination/Attenuator  | /                             | W/dB     |

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.



Mechanical Specifications:



PCB Material: ROGERS R04350B 0.508mm thickness trace width 1.07mm wide

Unit: Millimeters

Notes:

1. The housing and pins are silver-plated.
2. Tolerance  $\pm 0.2$ mm unless otherwise specified.
3. Co-planarity Specification: 0.1mm maximum.
4. Part Number, Lot Code, and Port Designation are printed on the top side of device
5. 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