

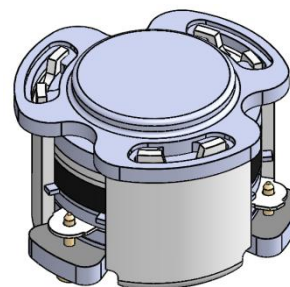


## DP2601C

### ENG PART:DP-7CM-2300T2400-CW

2300MHz to 2400MHz Single-Junction Surface Mount Circulator

| REV. | DESCRIPTION   | REVISOR | DATE      | APPROVED |
|------|---------------|---------|-----------|----------|
| A    | SAME AS REV.1 | ZC.Wu   | 2023/5/18 | Nick     |

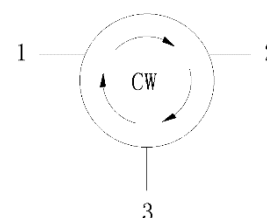


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 2300MHz to 2400MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -65°C to +150°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



**Electrical Specifications:**

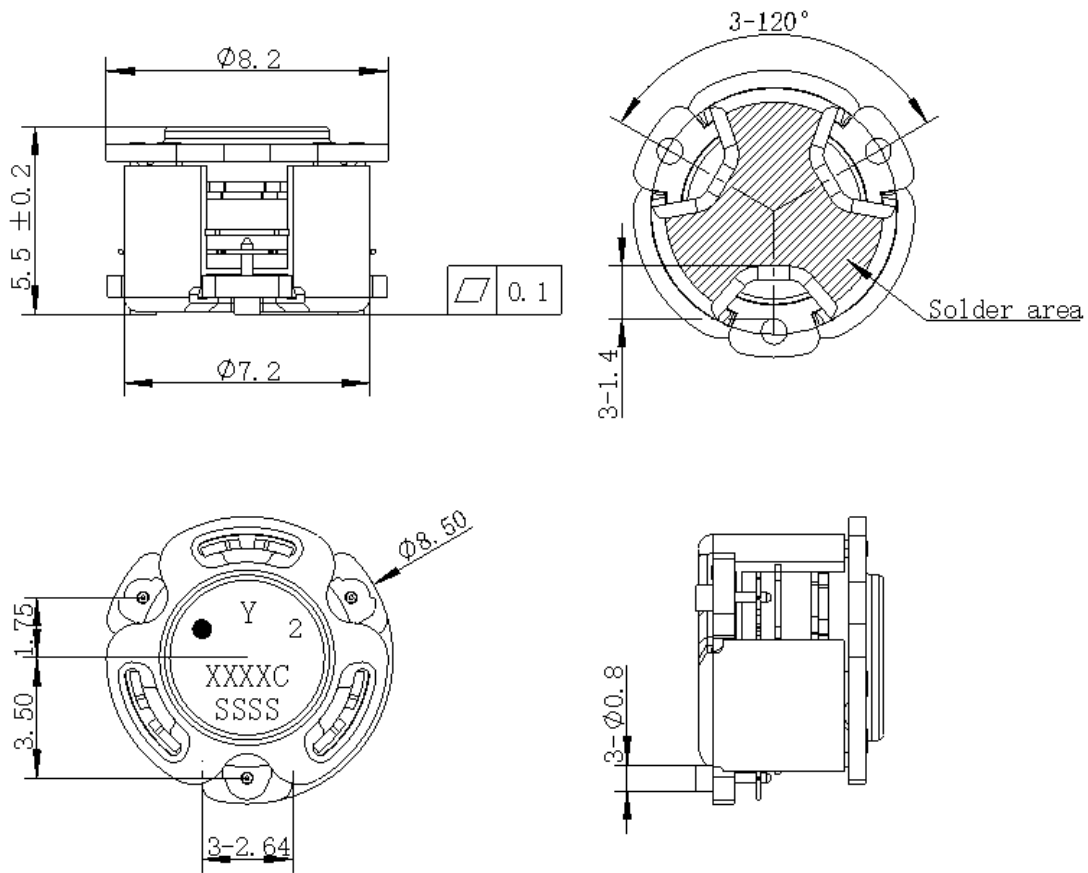
| ITEM                            | SPECIFICATION   |          |
|---------------------------------|---|----------|
| Frequency                       | 2300~2400   | MHz      |
| Extend Frequency                | 2100-2600   | MHz      |
| Direction                       | CW  |          |
| Impedance                       | Typ: 50   | $\Omega$ |
| Insertion Loss (Max.)           | 0.23@25°C $\pm$ 10°C<br>0.27@-40~+120°C   | dB       |
| Isolation (Min.)                | 21<br>8@2100-2600MHz  | dB       |
| Return Loss (Min.)              | 22  | dB       |
| 3rd IMD (Max.)                  | -60   | dBc      |
| Group delay                     | 2   | ns       |
| 2nd harmonic attenuation        | 20@25°C<br>15@-40~+120°C  | dB       |
| 3rd harmonic attenuation        | 8   | dB       |
| Power FWD/REV/PEAK              | 25/-/200  | W        |
| Resonance point of out off band | 2100MHz-2600MHz   | W/dB     |
| Input Impedance ,real           | 48~54 (typ. 52) @2300 MHz<br>43~49 (typ. 46) @2350 MHz<br>42.5~48.5 (typ. 45.5) @2400 MHz | $\Omega$ |
| Input Impedance ,imaginary      | -8j ~0j @2300 MHz<br>-5j~+3j @2350 MHz<br>-4j~+4j @2400 MHz                               | $\Omega$ |

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 the operating temperature up to 130 °C.
4. **The two materials cannot absorb each other within a distance of 16mm (Center distance)**



### Mechanical Specifications:



Unit: Millimeters

#### Notes:

1. The housing and pins are silver-plated.
2. Tolerance  $\pm 0.2\text{mm}$  unless otherwise specified.
3. Co-planarity Specification: 0.1mm maximum.
4. PartNumber, Lot Code, and Port Designation are printed on the top side of device
5. The "Y" show on the label represents the producing year, when printing the producing year, A stands for 2022, B for 2023, C for 2024, and soon (reference DP's file WDPT PD-003).
6. The **XXXXC** on the label represents the last five digits of the PartNumber
7. The SSSS on the label represents the serial number
8. The black dot on the label represents the input port

