



DP2375C

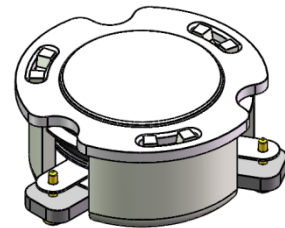
ENG PART:DP-15.5CM-2300T2400-CW

2300MHz to 2400MHz Single-Junction Surface Mount Circulator

| REV. | DESCRIPTION | REVISOR | DATE | APPROVED |
|------|---------------------------|-----------|-----------|----------|
| 1 | Creating datasheet | ZC.Wu | 2023/1/17 | Nick |
| 2 | Update mechanical drawing | Jie.Jiang | 2023/1/28 | Nick |

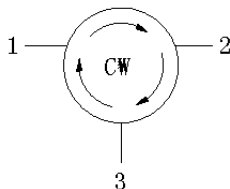
Applications:

- Wireless Infrastructure
- Power Amplifier



Features:

- Operating frequency range: 2300MHz to 2400MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -50°C to +150°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



Electrical Specifications:

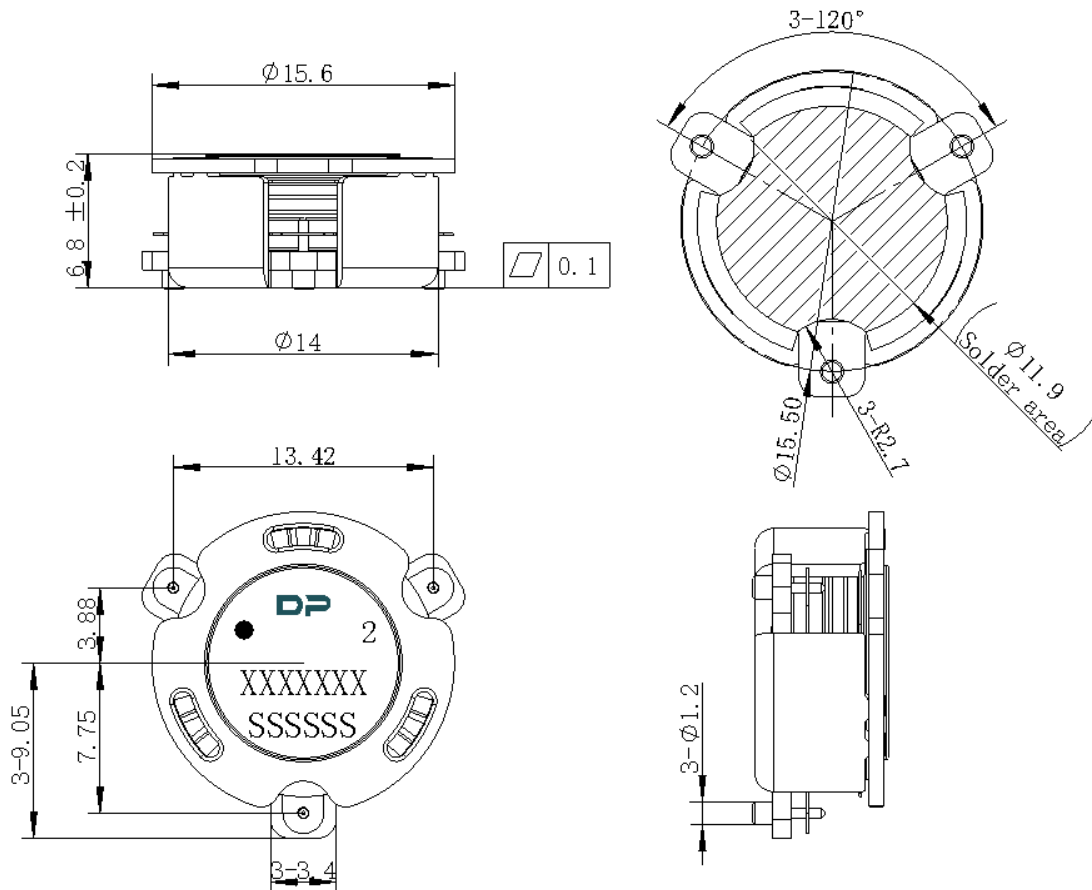
| ITEM | SPECIFICATION | |
|------------------------------|--|------------|
| Frequency | 2300~2400 | MHz |
| Direction | CW | |
| Impedance | Typ: 50 | Ω |
| Insertion Loss (Max.) | 0.25@-40~+105 $^{\circ}$ C 0.30@+105~+125 $^{\circ}$ C | dB |
| Insertion loss Ripple (Max.) | 0.10 | dB |
| Isolation (Min.) (P2-P1) | 23@-40~+105 $^{\circ}$ C 20@+105~+125 $^{\circ}$ C | dB |
| Return Loss (Min.)(P1、P2、P3) | 23@-40~+105 $^{\circ}$ C 20@+105~+125 $^{\circ}$ C | dB |
| Return Loss (Min.)(P2) | 30@25 \pm 5 $^{\circ}$ C 2280~2320MHz | dB |
| 3rd IMD (Max.) | -68@2x44.8dBm ,Spacing 5MHz (2300MHz/2305 MHz; 2347.5 MHz/2352.5 MHz; 2395 MHz/2400 MHz) | dBc |
| Harmonic product generation | -65@Input frequency:2300MHz/2350MHz/2400MHz Input power: 47.8dBm/tone | dBc |
| Group delay | - | ns |
| Phase flatness | 1 | $^{\circ}$ |
| 2nd attenuation | - | dB |
| 3rd attenuation | - | dB |
| Power FWD/REV/PEAK | 80/80/450 | 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.



3. Mechanical Specifications:



Unit : Millimeters

Notes:

1. The housing and pins are silver-plated.
2. Tolerance ± 0.2 mm unless otherwise specified.
3. Co-planarity Specification: 0.1 mm 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



Packaging Style:

| ITEM | W | A0 | B0 | K0 | D | E | F | F2 | P | P0 | P2 | T |
|-------|------|------|-------|------|------|------|-------|------|------|------|------|-------|
| DIM | 32 | 17.8 | Φ15.6 | 7.2 | Φ1.5 | 1.75 | 14.2 | 28.5 | 24 | 4 | 2 | 0.5 |
| TOL.E | ±0.3 | ±0.2 | ±0.2 | ±0.2 | +0.1 | ±0.1 | ±0.15 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.05 |

