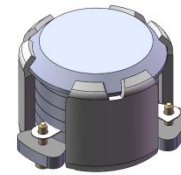




DP0406C

3600MHz to 3800MHz Single-Junction Surface Mount Circulator

| REV. | DESCRIPTION | REVISOR | DATE | APPROVED |
|------|-------------------------------------|-----------|------------|----------|
| A | Creating datasheet | Jie.Jiang | 2021/01/11 | Nick |
| B | Update the pin size from 0.7 to 0.6 | ZC.Wu | 2021/01/26 | Nick |

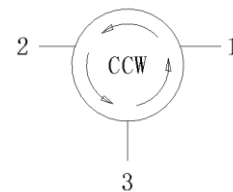


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 3600MHz to 3800MHz
- Operating temperature range: -40°C to +110°C
- Storage temperature range: -65°C to +155°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



Electrical Specifications:

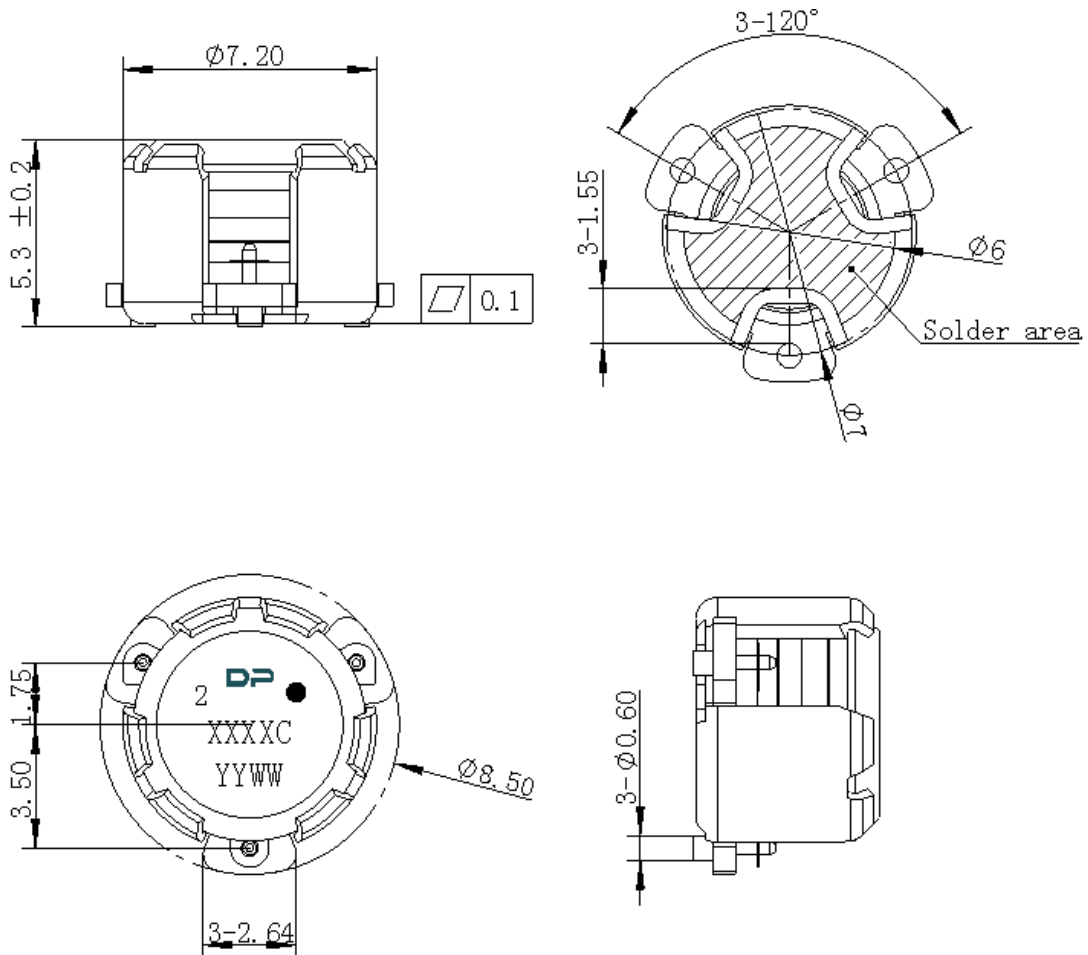
| ITEM | SPECIFICATION | |
|---------------------------------|--|----------|
| Frequency | 3600~3800 | MHz |
| Direction | CCW | |
| Impedance | Typ: 50 | Ω |
| Insertion Loss (Max.) | 0.25@25°C \pm 10°C 0.30@-40~+110°C | dB |
| Isolation (Min.) | 21 | dB |
| Return Loss (Min.) | 20 | dB |
| 3rd IMD (Max.) | -60 | dBc |
| Group delay | 2 | ns |
| 2nd harmonic attenuation | 30 | dB |
| 3rd harmonic attenuation | 15 | dB |
| Extend Frequency | 3200-3800 | MHz |
| Isolation of extend frequency | 16 | dB |
| Power FWD/REV/PEAK | 25/-/200 | W |
| Resonance point of out off band | Resonance point away 3200MHz-3800MHz | W/dB |
| Input Impedance ,real | 46 Min. @3600Mhz 55 Max. @3600MHz 45 Min. @3700Mhz 53.5 Max. @3700MHz 45 Min. @3800Mhz 54 Max. @3800MHz | Ω |
| Input Impedance ,imaginary | 0j Min. @3600 MHz 6j Max. @3600 MHz -4.5 Min. @3700 MHz 4.5 Max. @3700 MHz -5 Min. @3800 MHz 1 Max. @3800 MHz | Ω |

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.



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: 0.1mm maximum.
4. Part Number, Lot Code, and Port Designation are printed on the top side of device
5. The **XXXXC** on the label represents the last five digits of the Part Number.
6. Date code is in format **YYWW**
7. The black dot on the label represents the input port



Packaging Style:

| ITEM | W | A0 | B0 | C0 | K0 | D | E | F | F2 | P | P0 | P2 | T |
|------|------|------|------|------|------|------|------|-------|------|------|------|------|-------|
| DIM | 24 | Φ7.4 | 9.2 | 2.7 | 6.0 | Φ1.5 | 1.75 | 11.5 | - | 20 | 4 | 2 | 0.5 |
| TOLE | ±0.2 | ±0.2 | ±0.2 | ±0.2 | ±0.2 | +0.1 | ±0.1 | ±0.15 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.05 |

