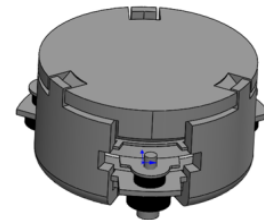




## DP1025C

### 3542.5MHz to 3800MHz Single-Junction Surface Mount Circulator

| REV. | DESCRIPTION   | REVISOR | DATE       | APPROVED |
|------|---|---------|------------|----------|
| A    | Creation  | TZ.Wang | 2020/10/14 | DP.Zhang |
| B    | Updated the packaging style.                                      | TZ.Wang | 2020/11/03 | DP.Zhang |
| C    | Changed the product height, frequency range and 2nd harmonic      | TZ.Wang | 2020/11/20 | DP.Zhang |
| D    | Changed the product height  | TZ.Wang | 2020/12/2  | DP.Zhang |
| E    | Changed the frequency from 3542.5MHz~3700MHz to 3542.5MHz~3800MHz | TZ.Wang | 2021/06/21 | DP.Zhang |

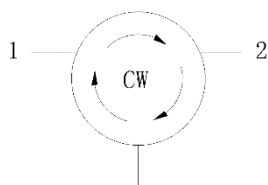


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 3542.5MHz to 3800MHz
- Operating temperature range: -40°C to +105°C
- Storage temperature range: -55°C to +150°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



### Electrical Specifications:

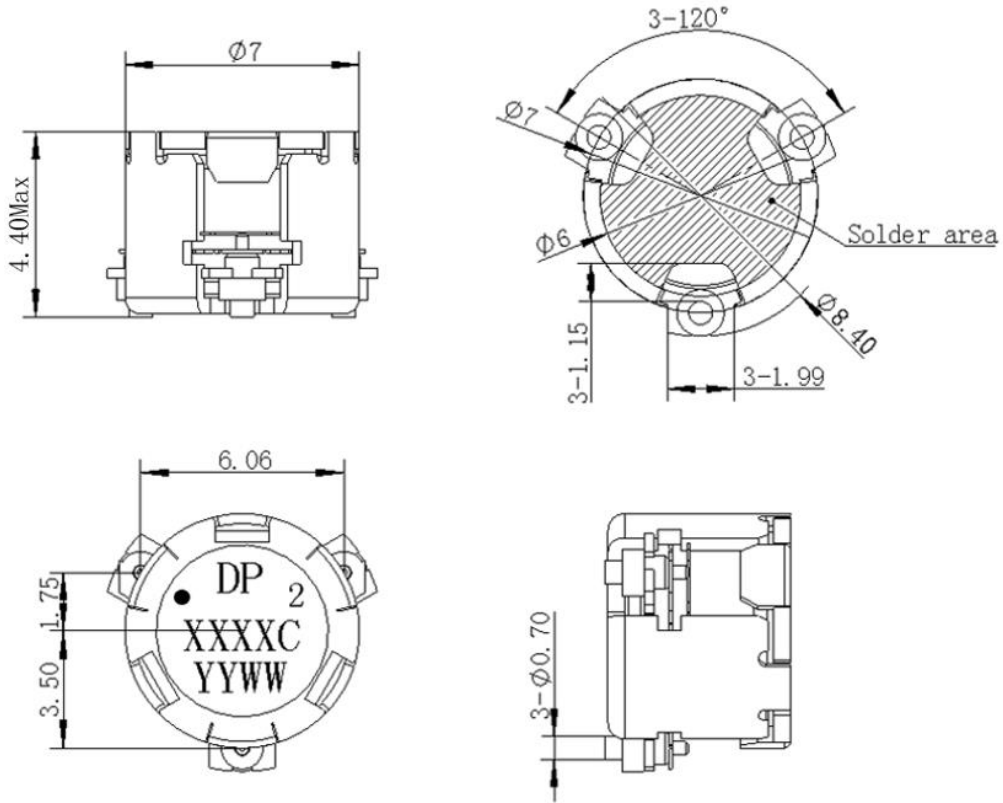
| ITEM                  | SPECIFICATION      |          |
|-----------------------|--------------------|----------|
| Frequency             | 3542.5~3800        | MHz      |
| Direction             | CW                 |          |
| Impedance             | Typ: 50            | $\Omega$ |
| Insertion Loss (Max.) | 0.4@3542.5~3800MHz | dB       |
| Isolation (Min.)      | 20@3542.5~3800MHz  | dB       |
| Return Loss (Min.)    | 20@3542.5~3800MHz  | dB       |
| 2nd harmonic          | 10                 | dBc      |
| 3rd harmonic          | 5                  | dBc      |
| Power FWD/REV/PEAK    | 30/30/150          | 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 and pins are silver-plated.
2. Tolerance  $\pm 0.2$  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 **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 | 9.0  | 2.3  | 4.9  | Φ1.5 | 1.75 | 11.5  | -    | 20   | 4    | 2    | 0.5   |
| TOLE | ±0.2 | ±0.2 | ±0.2 | ±0.2 | ±0.1 | +0.1 | ±0.1 | ±0.15 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.05 |

