

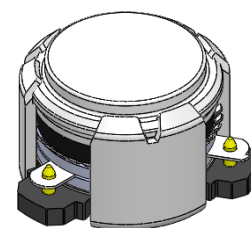


DP2947C

ENG PART:DP-10.2CM-1700T1950-CW

1700MHz to 1950MHz Single-Junction Surface Mount Circulator

| REV. | DESCRIPTION | REVISOR | DATE | APPROVED |
|------|--------------------|---------|------------|----------|
| 1 | Creating datasheet | ZC.Wu | 2023/12/11 | Nick |

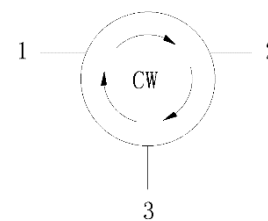


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 1700MHz to 1950MHz
- Operating temperature range: -40°C to +85°C
- Storage temperature range: -50°C to +135°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



Electrical Specifications:

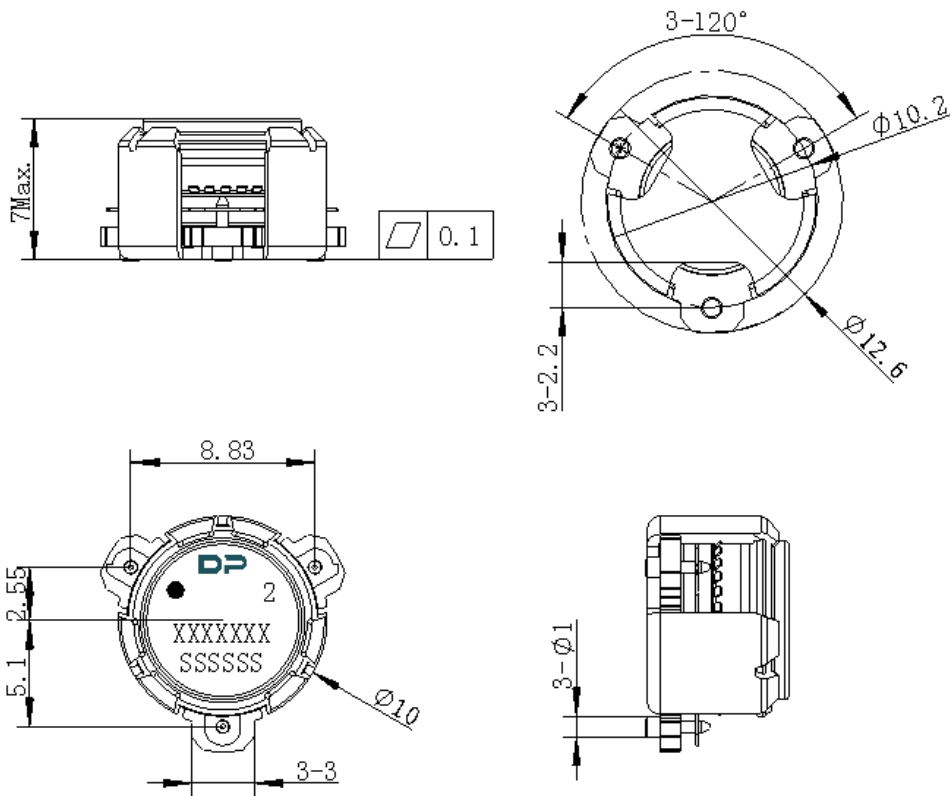
| ITEM | SPECIFICATION | |
|------------------------|---------------|----------|
| Frequency | 1700~1950 | MHz |
| Direction | CW | |
| Impedance | Typ: 50 | Ω |
| Insertion Loss (Max.) | 0.4 | dB |
| Isolation (Min.) | 16 | dB |
| Return Loss(Min.) | 16 | dB |
| 3rd IMD (Max.) | - | dBc |
| 2nd harmonic | - | dBc |
| 3rd harmonic | - | dBc |
| Power FWD/REV/PEAK | 30/30/250 | 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:



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 **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 | C0 | K0 | D | E | F | F2 | P | P0 | P2 | T |
|------|------|-------|------|------|------|------|------|-------|------|------|------|------|-------|
| DIM | 32 | Φ10.4 | 12.5 | 4 | 7.0 | Φ1.5 | 1.75 | 14.2 | 28.5 | 24 | 4 | 2 | 0.5 |
| TOLE | ±0.3 | ±0.2 | ±0.2 | ±0.2 | ±0.2 | +0.1 | ±0.1 | ±0.15 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.05 |

