

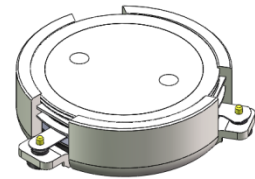


DP3033C

ENG PART:DP-27CM-606T678-CW

606MHz to 678MHz Single-Junction Surface Mount Circulator

| REV. | DESCRIPTION | REVISOR | DATE | APPROVED |
|------|--------------------|---------|-----------|----------|
| 1 | Creating datasheet | ZC.Wu | 2024/1/26 | Nick |

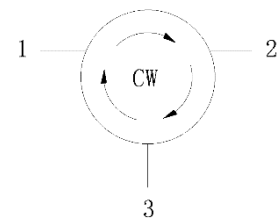


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range:606MHz to 678MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -50°C to +150°C
- BeOfree&RoHS compliant



Block Diagram



Electrical Specifications:

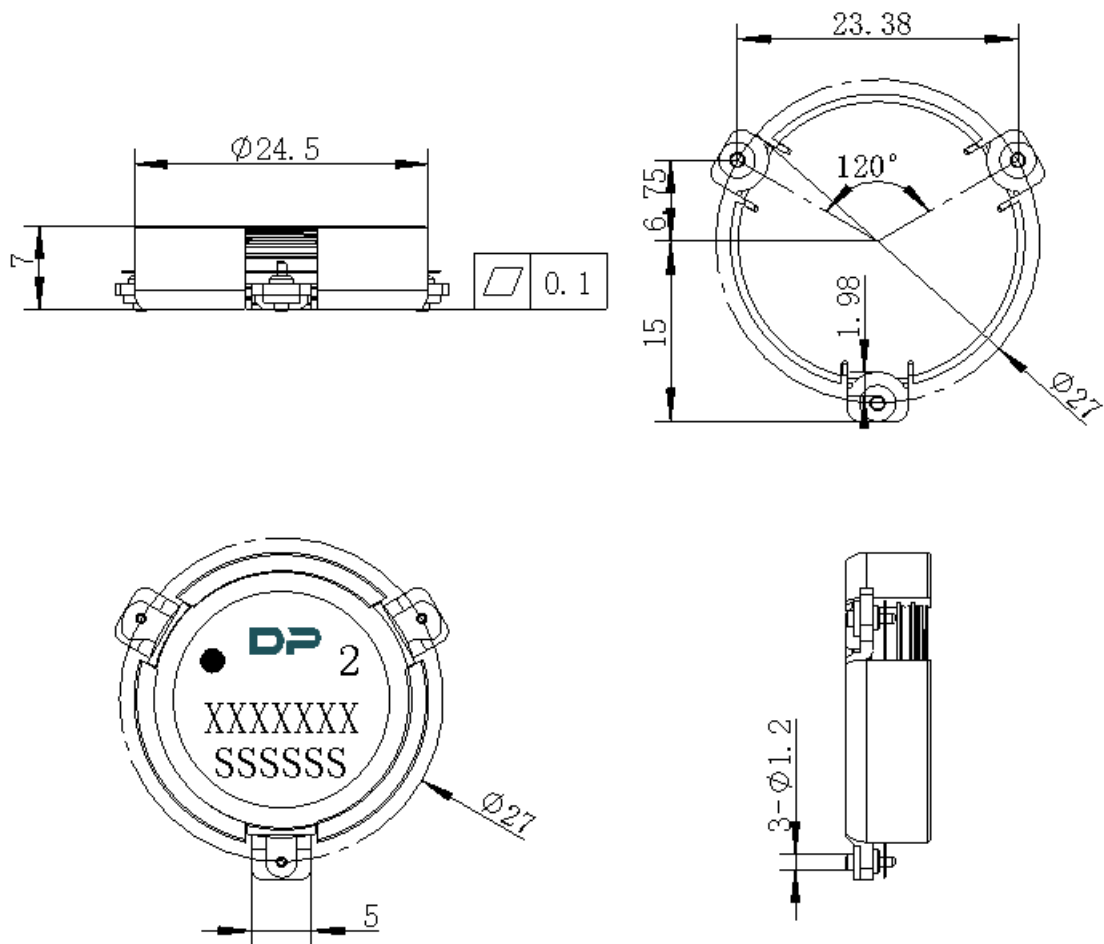
| ITEM | SPECIFICATION | |
|---|--|----------|
| Frequency | 606~678 | MHz |
| Extend frequency | 546~738 | MHz |
| Direction | CW | |
| Impedance | Typ: 50 | Ω |
| Insertion Loss (Max.) | Typ: 0.25 0.30@-40~+120°C | dB |
| Isolation (Min.) | Typ: 22 19@-40~+120°C 5@546-738 | dB |
| Return Loss (Min.) | Typ: 22 19@-40~+120°C 5@546-738 | dB |
| Power FWD/REV/PEAK | 200/100/1000 | W |
| IMD (Max.) | Typ: -65@2X60W CW tones, Spacing 5MHz -60@2X60W CW tones, Spacing 5MHz (-40~+120°C) | dBc |
| Out Band Resonance | / | |
| Group delay | 3 | ns |
| Ripple of group delay in extend frequency | 3 | ns |
| 2nd harmonic attenuation | 15 | dB |
| 3rd harmonic attenuation | 10 | dB |
| 2nd harmonic suppression (Max.) | -60@60W | dBc |
| 3rd harmonic suppression (Max.) | -60@60W | dBc |
| Input Impedance ,real | / | Ω |
| Input Impedance ,imaginary | / | Ω |
| 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: 0.1 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