

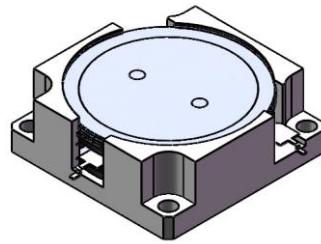


DP2679C

ENG PART:DP-31.8X31.8CD-758T960-CW

758MHz to 960MHz Single-Junction Drop-in Circulator

| REV. | DESCRIPTION | REVISOR | DATE | APPROVED |
|------|---------------|---------|----------|----------|
| A | SAME AS REV.1 | ZZ.Zhu | 2023/8/3 | Nick |

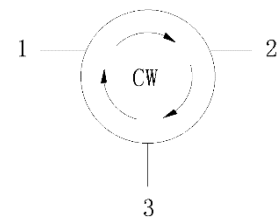


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 758MHz to 960MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -55°C to +155°C
- BeO free & RoHS compliant



Block Diagram

**Electrical Specifications:**

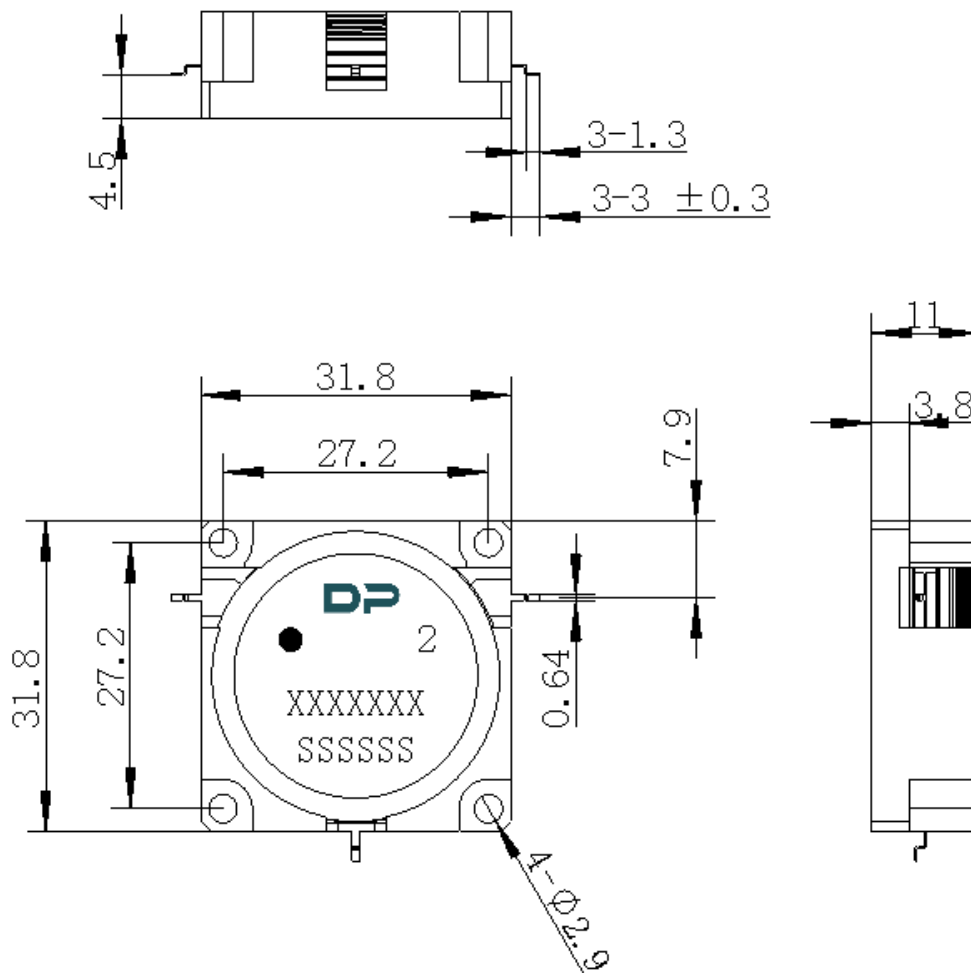
| ITEM | SPECIFICATION | |
|---|--|----------|
| Frequency | 758~960 | MHz |
| Direction | CW | |
| Impedance | Typ: 50 | Ω |
| Insertion Loss (Max.) | 0.30@25±5°C (758~821MHz & 925~960MHz) 0.35@-20~+105°C 0.40@-40~-20&+105~+125°C | dB |
| Isolation (Min.) | 20@25±5°C (758~821MHz & 925~960MHz) 18@-20~+105°C (758~821MHz & 925~960MHz) 15@-40~-20&+105~+125°C 7@658MHz~1020 MHz | dB |
| Return Loss (Min.) | 20@25±5°C (758~821MHz & 925~960MHz) 18@-20~+105°C (758~821MHz & 925~960MHz) 15@-40~-20&+105~+125°C (758~821MHz & 925~960MHz) | dB |
| 3rd IMD (Max.)@ 25±5°C | -68@2x65W CW tones, 1MHz spacing (850M/900M) -70@2x65W CW tones, 1MHz spacing (700M/800M) | dBc |
| 3rd IMD (Max.)@-40~+125°C | -65@2x65W CW tones, 1MHz spacing (850M/900M) - 65@2x65W CW tones, 1MHz spacing (700M/800M) | dBc |
| Extend frequency | 658~1020 | MHz |
| Group delay | 2.5 | ns |
| Ripple of group delay in extend frequency | 2 | ns |
| Resonance point of out-off-band | Resonance point away 658MHz to1020 MHz | MHz |
| 2nd harmonicsuppression | 12@+25°C±5°C 10@-40°C~+125°C | dBc |
| 3rd harmonicsuppression | 8 | dBc |
| Power FWD/REV/PEAK | 280/150/2200 | W |
| Termination/Attenuator | -/- | W/dB |
| Input Impedance ,real | - | Ω |
| Input Impedance ,imaginary | - | Ω |
| Output Impedance ,real | - | Ω |
| Output Impedance ,imaginary | - | 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.



Mechanical Specifications:



Unit: Millimeters

Notes:

1. The housing is nickel-plated and the circuit is 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