

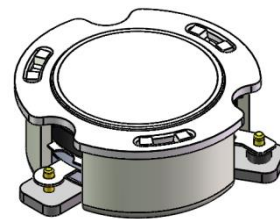


## DP2817C

### ENG PART:DP-20.4CM-3800T4000-CW

3800MHz to 4000MHz Single-Junction Surface Mount Circulator

| REV. | DESCRIPTION   | REVISOR | DATE      | APPROVED |
|------|---------------|---------|-----------|----------|
| A    | SAME AS REV.2 | ZZ.Zhu  | 2023/9/22 | Nick     |

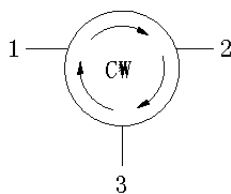


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 3800MHz to 4000MHz
- Operating temperature range: -40°C to +135°C
- Storage temperature range: -50°C to +150°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



### Electrical Specifications:

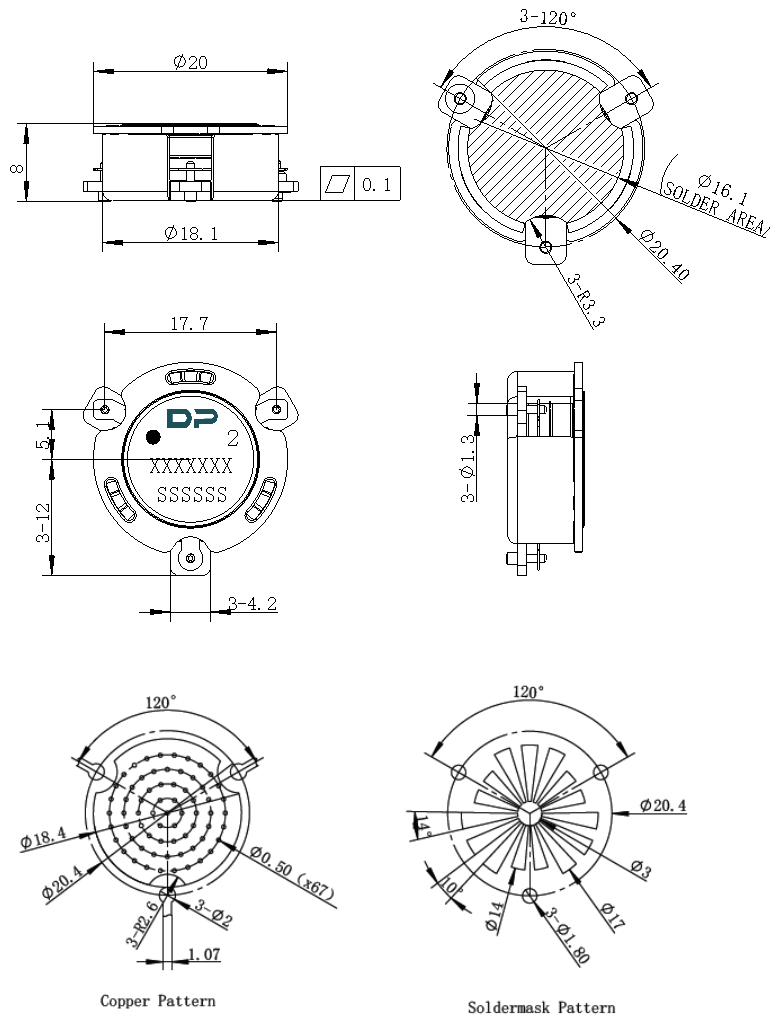
| ITEM                       | SPECIFICATION                  |            |
|----------------------------|--------------------------------|------------|
| Frequency                  | 3800~4000                      | MHz        |
| Direction                  | CW                             |            |
| Impedance                  | Typ: 50                        | $\Omega$   |
| Insertion Loss (Max.)      | 0.20@25±5°C<br>0.25@-40~+135°C | dB         |
| Isolation (Min.)           | 25@25±5°C<br>21@-40~+135°C     | dB         |
| Return Loss (Min.)         | 25@25±5°C<br>21@-40~+135°C     | dB         |
| 3rd IMD (Max.)             | -65@2x40W, Spacing 5MHz        | dBc        |
| Group delay                | -                              | ns         |
| 2nd attenuation            |                                | dB         |
| 3rd attenuation            |                                | dB         |
| Power FWD/REV/PEAK         | 200/200/1500                   | W          |
| Input Impedance ,real      | 44~56                          | $\Omega$   |
| Input Impedance ,imaginary | -7.5j~+7.5j                    | j $\Omega$ |
| Resonance point out of     | 3200~4600MHz                   |            |
| 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.



### 3. Mechanical Specifications:



PCB Material: ROGERS R04350B 0.508mm thickness trace width 1.07mm wide

Unit: Millimeters

#### Notes:

1. The housing and pins are silver-plated.
2. Tolerance  $\pm 0.2$ mm unless otherwise specified.
3. Co-planarity Specification: 0.1mm maximum.
4. Part Number, Lot Code, and Port Designation are printed on the top side of device.
5. The **XXXXXXXX** 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