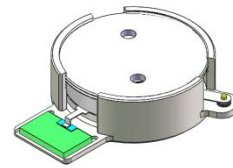




## DP0343S

### 1805MHz to 1880MHz Single-Junction Surface Mount Isolator

| REV. | DESCRIPTION                          | REVISOR | DATE       | APPROVED |
|------|--------------------------------------|---------|------------|----------|
| A    | Creating datasheet                   | ZC.Wu   | 2020/10/15 | Nick     |
| B    | The Pin size changed from 1.2 to 1.3 | ZC.Wu   | 2021/8/23  | Nick     |

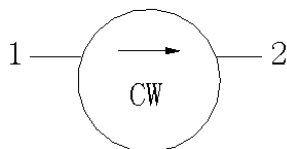


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 1805MHz to 1880MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -40°C to +150°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



### Electrical Specifications:

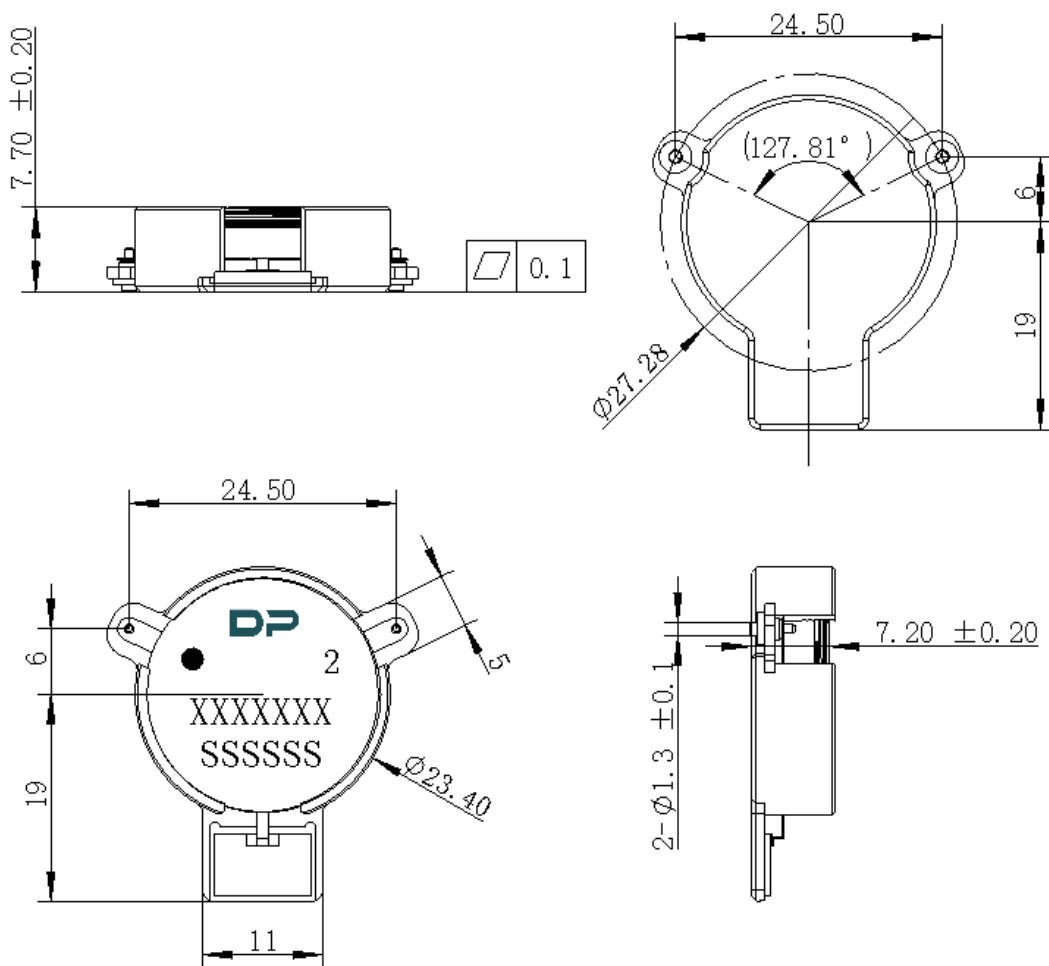
| ITEM                                      | SPECIFICATION  |          |
|---|--|----------|
| Frequency                                 | 1805~1880  | MHz      |
| Direction                                 | CW   |          |
| Impedance                                 | Typ: 50  | $\Omega$ |
| Insertion Loss (Max.)                     | 0.17@25±10℃<br>0.20@-40~+125℃  | dB       |
| Isolation (Min.)                          | 26<br>Typ28  | dB       |
| Return Loss (Min.)                        | 25   | dB       |
| 3rd IMD (Max.)                            | -78@2*100W CW,Spacing 1MHz(25±10℃ )<br>-75@2*100W CW,Spacing 1MHz (-40~+125℃ ) | dBc      |
| Extend frequency                          | 1655~2030  | MHz      |
| Group delay                               | 2.0  | ns       |
| Ripple of group delay in extend frequency | 2.0  | ns       |
| Isolationof extend frequency              | 13   |          |
| 2nd harmonicsuppression                   | 20   | dBc      |
| 3rd harmonicsuppression                   | 10   | dBc      |
| Power FWD/REV/PEAK                        | 200/150 (housing temperature 210 ℃,time 10<br>minutes) /1600                   | W        |
| Termination/Attenuator                    | 150/-  | W/dB     |
| Input Impedance ,real                     | +45.5~+53.5  | $\Omega$ |
| Input Impedance ,imaginary                | -4.5j~+4.5j  | $\Omega$ |
| Output Impedance ,real                    | +45.5~+53.5  | $\Omega$ |
| Output Impedance ,imaginary               | -4.5j~+4.5j  | $\Omega$ |
| Resonance point of out-off-band           | 1605MHz~2080 MHz   |          |

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 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