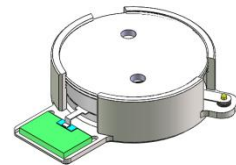




DP0255S

758MHz to 803MHz Single-Junction Surface Mount Isolator

| REV. | DESCRIPTION | REVISOR | DATE | APPROVED |
|------|--|---------|------------|----------|
| A | Creation | ZC.Wu | 2020/06/02 | DP.Zhang |
| B | Increase the size from the top of the box cover to the bottom of the housing | TZ.Wang | 2020/10/13 | DP.Zhang |
| C | Change the storage temperature range and some electrical specifications | TZ.Wang | 2020/10/26 | DP.Zhang |
| D | The Pin size changed from 1.2 to 1.3 | ZC.Wu | 2021/8/23 | Nick |

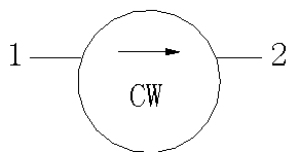


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 758MHz to 803MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -40°C to +115°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



Electrical Specifications:

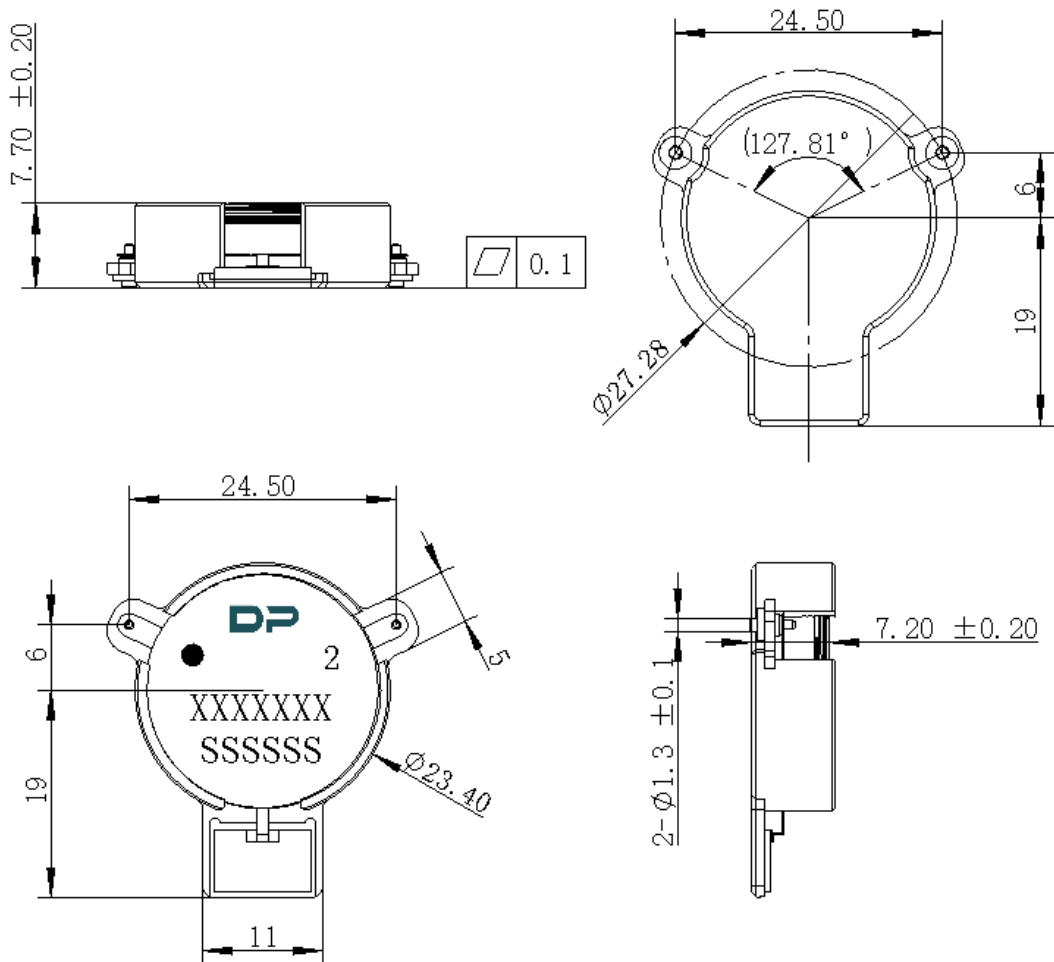
| ITEM | SPECIFICATION | |
|---|---|----------|
| Frequency | 758~803 | MHz |
| Direction | CW | |
| Impedance | Typ: 50 | Ω |
| Insertion Loss (Max.) | 0.30@-40~+90 $^{\circ}$ C 0.35@+90~+120 $^{\circ}$ C | dB |
| Isolation (Min.) | 22@-40~0 $^{\circ}$ C 23@0~+120 $^{\circ}$ C Typ.25 | dB |
| Return Loss Input(Min) | 22@-40~0 $^{\circ}$ C 23@0~+120 $^{\circ}$ C | dB |
| Return Loss Out(Min) | 22 | dB |
| 3rd IMD (Max.) | -68@2*65W CW,Spacing 1MHz -65@2*65W CW,Spacing 1MHz (+90~+120 $^{\circ}$ C) | dBc |
| Extend frequency | 670~890 | MHz |
| Group delay | 2.5 | ns |
| Ripple of group delay in extend frequency | 2.5 | ns |
| Isolationof extend frequency | 8 | dB |
| 2nd harmonicsuppression | 10 | dBc |
| 3rd harmonicsuppression | 10 | dBc |
| Power FWD/REV/PEAK | 150/60 (housing temperature 210 $^{\circ}$ C,time 10 minutes) /1000 | W |
| Input Impedance ,real | +43~+57.5@-40~0 $^{\circ}$ C +44~+56.5@0~+120 $^{\circ}$ C | Ω |
| Input Impedance ,imaginary | -6j~+6.5j@-40~0 $^{\circ}$ C -5j~+6.5j@0~+120 $^{\circ}$ C | Ω |
| Resonance point of out-off-band | 701MHz~891 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 $^{\circ}$ C.



Mechanical Specifications:



Unit: Millimeters

Notes:

1. The housing and pins are silver-plated.
2. Tolerance ±0.2mm unless otherwise specified.
3. Co-planarity Specification: 0.1mm maximum.
4. PartNumber, Lot Code, and Port Designation are printed on the top side of device.
5. PartNumber format shall be XXXXXXX
6. Serial Number format shall be SSSSSS