

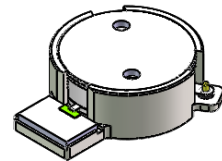


DP2649S

ENG PART:DP-21.4IM-859T894-CW

859MHz to 894MHz Single-Junction Surface Mount Isolator

| REV. | DESCRIPTION | REVISOR | DATE | APPROVED |
|------|--------------------|---------|----------|----------|
| A | Creating datasheet | ZZ.Zhu | 2023/8/3 | Nick |

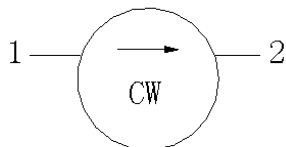


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 860MHz to 894MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -40°C to +125°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram

**Electrical Specifications:**

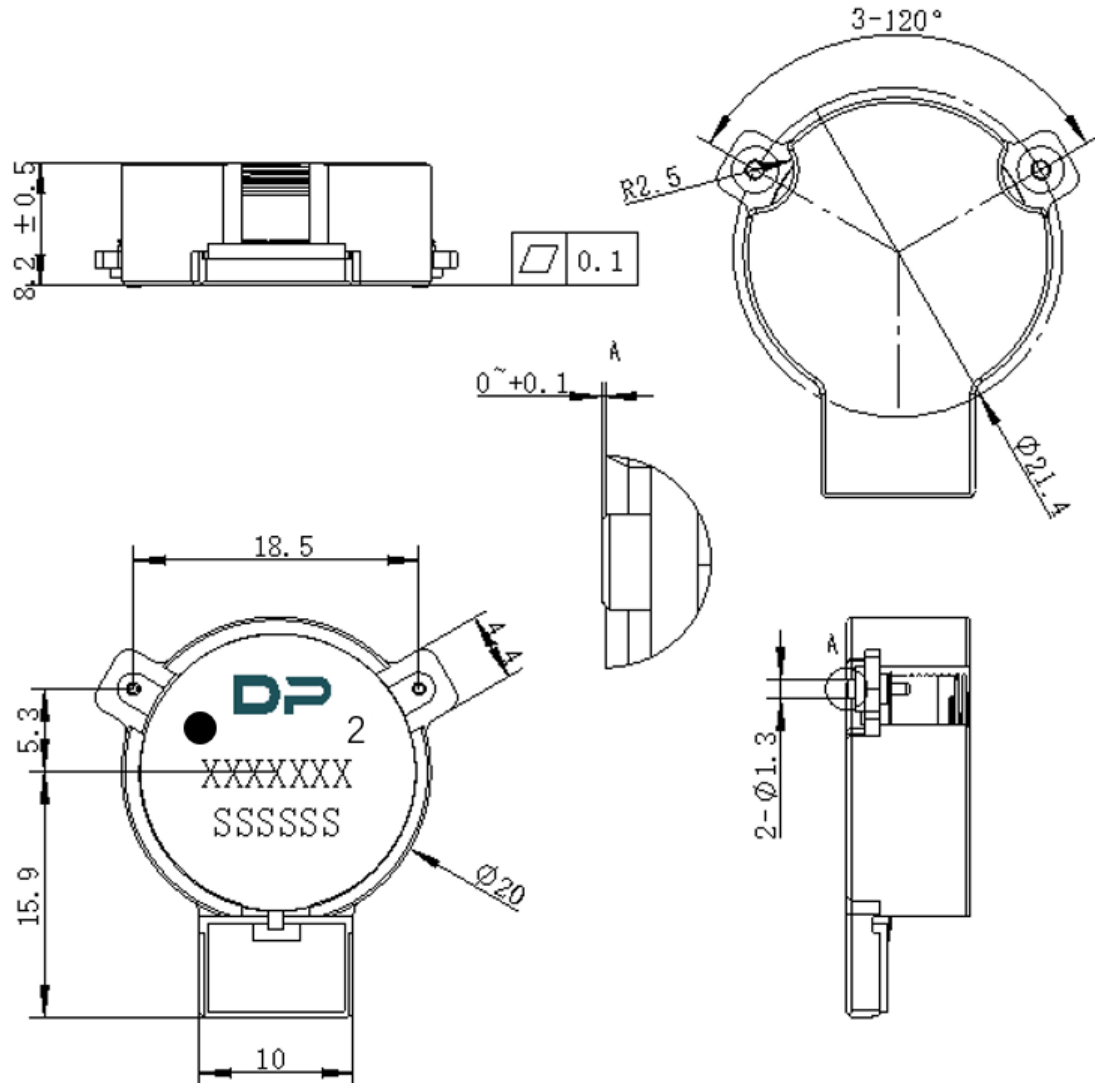
| ITEM | SPECIFICATION | |
|------------------------------|--|----------|
| Frequency | 859~894 | MHz |
| Direction | CW | |
| Impedance | Typ: 50 | Ω |
| Insertion Loss (Max.) | 0.25 | dB |
| Isolation (Min.) | 22@859~894MHz 20@839~914MHz 10@824~929MHz 8@789~964MHz 6@754~999MHz | dB |
| Return Loss (Min.) | 20@-40~0°C 22@0~+125°C 16@839~914MHz 6@824~929MHz 6@789~964MHz 3@754~999MHz | dB |
| 3rd IMD (Max.) | -65@2x50W CW tones | dBc |
| 5th IMD (Max.) | -79@2x50W CW tones, | dBc |
| Harmonics | 0@2x f 100W CW -10@3x f 100W CW -10@4x f 100W CW -35@5x f 100W CW -25@6x f 100W CW -25@7x f 100W CW | dBm |
| Out of band attenuation | 10@2x f 5@3x f 5@nx f (n=order of in- band frequency multiple) | dB |
| Group delay | 0.5~2.8 | ns |
| Deviation from nominal delay | ± 0.05 | ns |
| Power FWD/REV/PEAK | 150/80/1500 | W |
| Max voltage rating | 1080 | V |
| NoResonance point | - | |
| Termination/Attenuator | 150/- | 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



Packaging Style:

| ITEM | W | A0 | B0 | K0 | D | E | F | F2 | P | P0 | P2 | T |
|------|------|-------|------|------|------|------|-------|------|------|------|------|-------|
| DIM | 44 | Φ20.2 | 26.3 | 8.5 | Φ1.5 | 1.75 | 20.2 | 40.5 | 32 | 4 | 2 | 0.5 |
| TOL | ±0.3 | ±0.2 | ±0.2 | +0.2 | +0.1 | ±0.1 | ±0.15 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.05 |

