

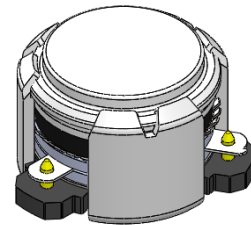


DP0868C

ENG PART:DP-10.2CM-2496T2690-CCW

2496MHz to 2690MHz Single-Junction Surface Mount Circulator

| REV. | DESCRIPTION | REVISOR | DATE | APPROVED |
|------|--------------------|-----------|----------|----------|
| A | Creating datasheet | Jie.Jiang | 2022/2/7 | Nick |

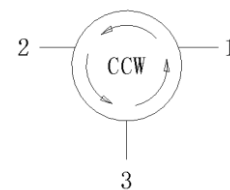


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 2496MHz to 2690MHz
- Operating temperature range: -40°C to +85°C
- Storage temperature range: -40°C to +125°C
- Small surface-mount package delivered on T&R
- BeOfree , RoHS & REACH compliant



Block Diagram



Electrical Specifications:

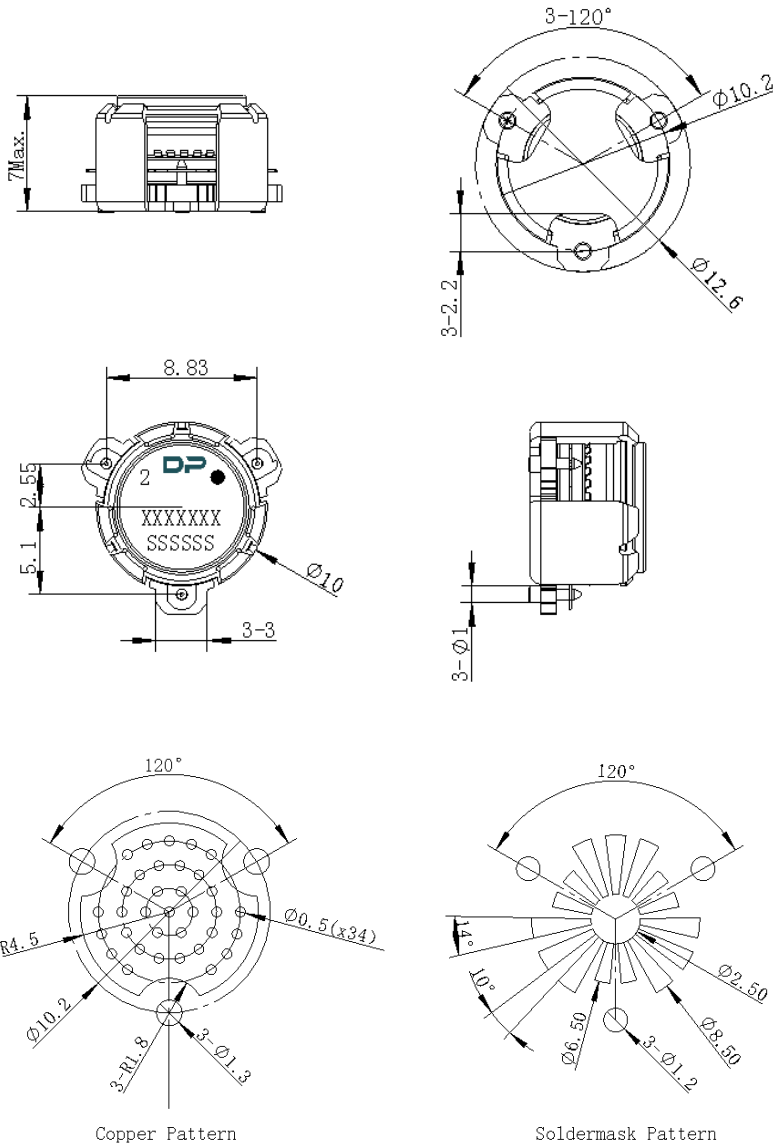
| ITEM | SPECIFICATION | |
|----------------------------|--|------------|
| Frequency | 2496~2690 | MHz |
| Direction | CCW | |
| Impedance | Typ: 50 | Ω |
| Insertion Loss (Max.) | 0.25@25 \pm 5 $^{\circ}$ C 0.30@-40~+85 $^{\circ}$ C | dB |
| Isolation (Min.) | 22 | dB |
| Return Loss (Min.) | 22 | dB |
| rd IMD (Max.) | -60@2x43dBm CW tones, 5MHz spacing -65@2x41dBm CW tones, 5MHz spacing | dBc |
| Group delay | 2 | ns |
| 2nd harmonic | / | dBc |
| 3rd harmonic | / | dBc |
| Power FWD/REV/PEAK | 30/30/200 | W |
| Termination/Attenuator | / | W/dB |
| Input Impedance ,real | / | Ω |
| Input Impedance ,imaginary | / | j 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:



Notes:

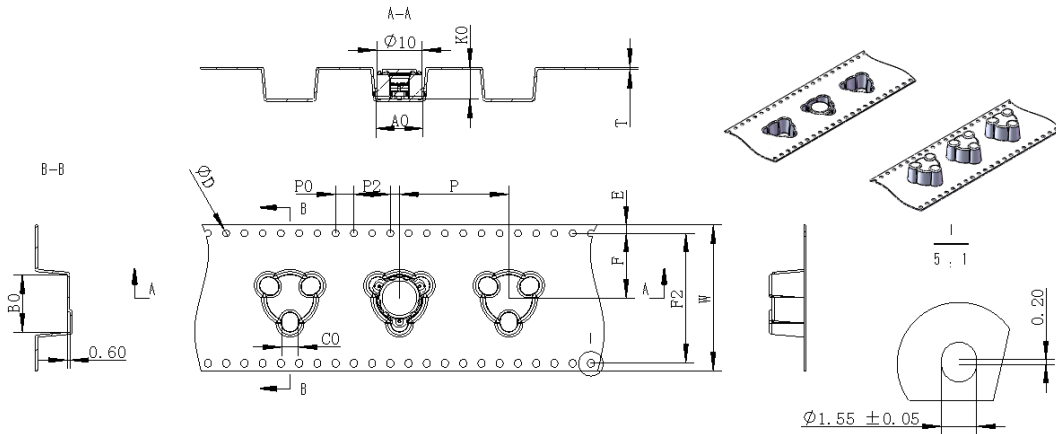
1. The housing and pins are silver-plated.
2. Tolerance ± 0.2 mm unless otherwise specified.
3. Co-planarity Specification: 0.1mm maximum.
4. Part Number, Lot Code, and Port Designation are printed on the top side of device
5. The XXXXXXX on the label represents the part number
6. The SSSSSS on the label represents the serial number
7. The black dot on the label represents the input port

Unit : Millimeters

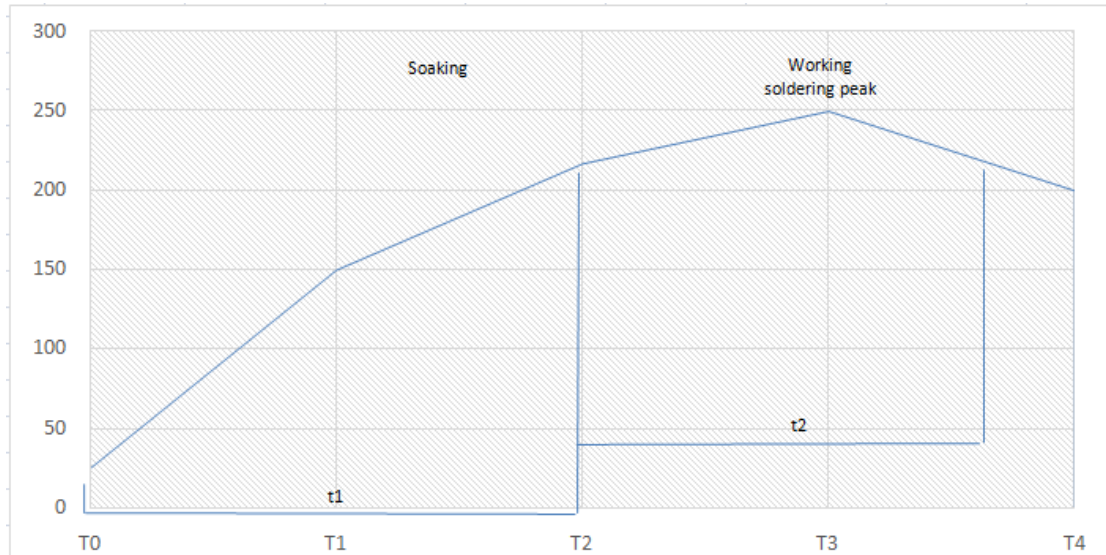


Packaging Style:

| | | | | | | | | | | | | | |
|------|------|-------|------|------|------|------|------|-------|------|------|------|------|-------|
| ITEM | W | A0 | B0 | C0 | K0 | D | E | F | F2 | P | P0 | P2 | T |
| DIM | 32 | Φ10.4 | 12.5 | 4 | 7.0 | Φ1.5 | 1.75 | 14.2 | 28.5 | 24 | 4 | 2 | 0.5 |
| TOLE | ±0.3 | ±0.2 | ±0.2 | ±0.2 | ±0.2 | +0.1 | ±0.1 | ±0.15 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.05 |



RECOMMENDED REFLOW PROFILE:



| | | | | | |
|------------------|---------|-----|--------|---------|-----|
| Temperature zone | T0 | T1 | T2 | T3 | T4 |
| Temp. (°C) | 25 | 150 | 210 | 240-260 | 200 |
| Time (s) | t1 | | t2 | | |
| | 160-200 | | 60-180 | | |