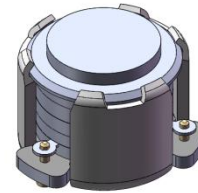




DP0244C

2496MHz to 2690MHz Single-Junction Surface Mount Circulator

| REV. | DESCRIPTION | REVISOR | DATE | APPROVED |
|------|-------------|---------|------------|----------|
| A | | ZC.Wu | 2020/05/13 | Nick |

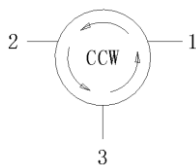


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 2496MHz to 2690MHz
- Operating temperature range: -40°C to +110°C
- Storage temperature range: -40°C to +125°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



Electrical Specifications:

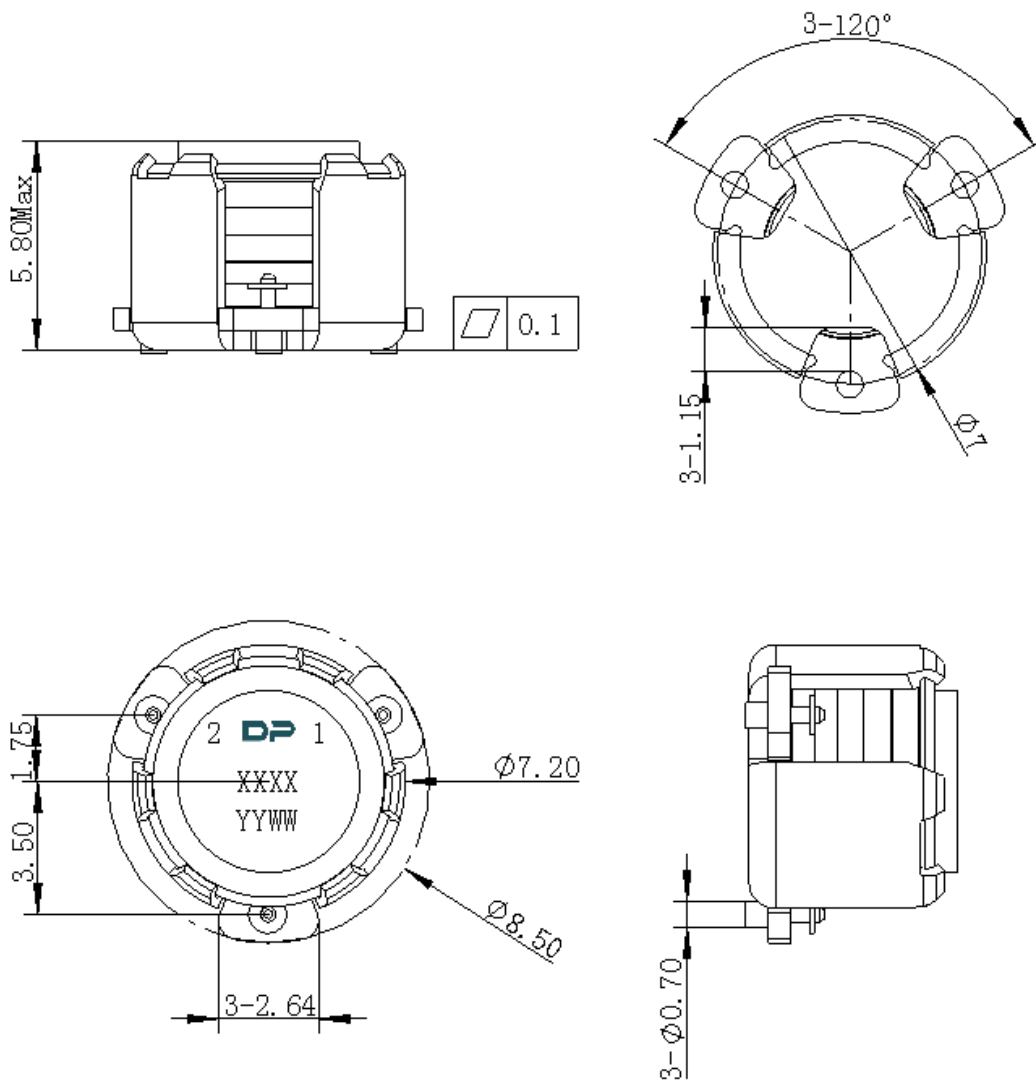
| ITEM | SPECIFICATION | |
|---------------------------------|---|----------|
| Frequency | 2496~2690 | MHz |
| Direction | CCW | |
| Impedance | Typ: 50 | Ω |
| Insertion Loss (Max.) | 0.3 | dB |
| Isolation (Min.) | 20 | dB |
| Return Loss (Min.) | 22 3@(Frequency band +/- 600MHz) | dB |
| 3rd IMD (Max.) | -60@2x5W CW tones, 1MHz spacing | dBc |
| 3rd IMD (Max.) | -55@2x10W CW tones, 1MHz spacing | dBc |
| Group delay | 2 | ns |
| 2nd harmonic attenuation | 20 | dB |
| 3rd harmonic attenuation | 10 | dB |
| Nx harmonic attenuation | 5 | dB |
| 2nd Harmonic suppression (Max.) | -60@20W CW | dBc |
| 3rd Harmonic suppression (Max.) | -60@20W CW | dBc |
| Power FWD/REV/PEAK | 30/30/150 | W |
| Termination/Attenuator | / | W/dB |
| Reciprocity | -0.05~+0.05 @Delta(S21 / S32) within any 10 °C temperature range | dB |
| Reciprocity | -1~+1 @Delta(S21 / S32) within any 10 °C temperature range | Deg |

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 ± 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. Part Number is in format **XXXX**(Last four digits)
6. Date code is in format **YYWW**



Packaging Style:

| ITEM | W | A0 | B0 | C0 | K0 | D | E | F | F2 | P | P0 | P2 | T |
|------|------|------|------|------|------|------|------|-------|------|------|------|------|-------|
| DIM | 24 | Φ7.4 | 9.2 | 2.7 | 6.0 | Φ1.5 | 1.75 | 11.5 | - | 20 | 4 | 2 | 0.5 |
| TOLE | ±0.2 | ±0.2 | ±0.2 | ±0.2 | ±0.2 | +0.1 | ±0.1 | ±0.15 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.05 |

