

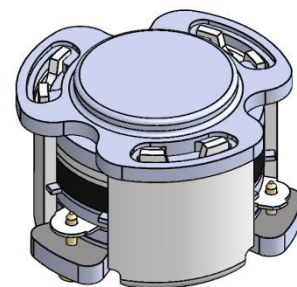


## DP2470C

### ENG PART:DP-7CM-3600T4000-CCW

3600MHz to 4000MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	SAME AS REV.1	ZZ.Zhu	2023/4/7	Nick
B	Added requirements for the safety spacing between the products	ZC.Wu	2024/9/5	Nick

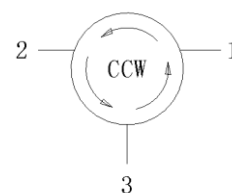


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 3600MHz to 4000MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -65°C to +150°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram

**Electrical Specifications:**

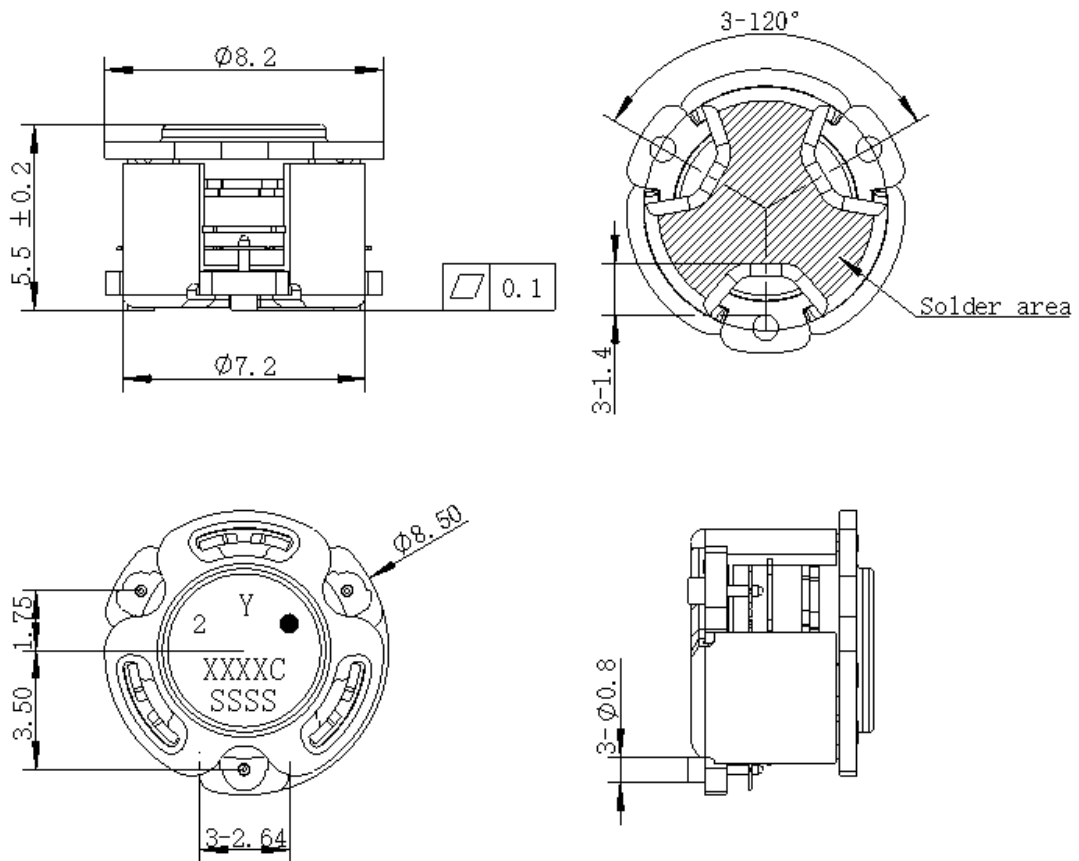
ITEM	SPECIFICATION	
Frequency	3600~4000	MHz
Extend Frequency	3400-4200	MHz
Direction	CCW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.30@25°C ± 10°C 0.35@-40~+120°C	dB
Isolation (Min.)	21 10@3400-4200MHz	dB
Return Loss (Min.)	21	dB
3rd IMD (Max.)	-60	dBc
Group delay	2	ns
2nd harmonic attenuation	20@25°C 10@-40~+120°C	dB
3rd harmonic attenuation	10	dB
Power FWD/REV/PEAK	25/-/200	W
Resonance point of out off band	3400MHz-4200MHz	W/dB
Input Impedance ,real	47~55@3600 MHz 43~49@3800 MHz 47~55@4000 MHz	$\Omega$
Input Impedance ,imaginary	-8j~0j(Typ.-4j)@3600 MHz -1j~+7j(Typ.+3j)@3800 MHz -2j~+6j(Typ.+2j)@4000 MHz	$\Omega$
Products cannot attract and exclude each other ( Distance between centers )	16	mm

## 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 the operating temperature up to 130 °C.
4. The two materials cannot absorb each other within a distance of 16mm (Center distance)



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: 0.1mm maximum.
4. Part Number, Lot Code, and Port Designation are printed on the top side of device
5. The "Y" show on the label represents the producing year, when printing the producing year, A stands for 2022, B for 2023, C for 2024, and soon (reference DP's file WDPT PD-003).
6. The **XXXXC** on the label represents the last five digits of the Part Number
7. The SSSS on the label represents the serial number
8. The black dot on the label represents the input port



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	-	16	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

