

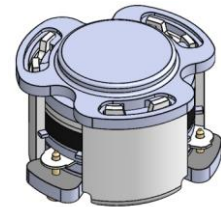


## DP0281C

### ENG PART:DP-7.2CM-3550T3700-CW

3550MHz to 3700MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A		ZC.Wu	2020/08/14	Nick
B	2nd harmonic attenuation changed from 18 to 15	ZC.Wu	2020/08/28	Nick
C	Updated the label format	ZC.Wu	2020/09/09	Nick
D	Update the label	ZZ.Zhu	2023/8/1	Nick
E	Update the outline drawing	ZC.Wu	2024/01/11	Nick

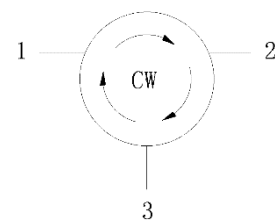


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 3550MHz to 3700MHz
- Operating temperature range: -40°C to +110°C
- Storage temperature range: -40°C to +125°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



### Electrical Specifications:

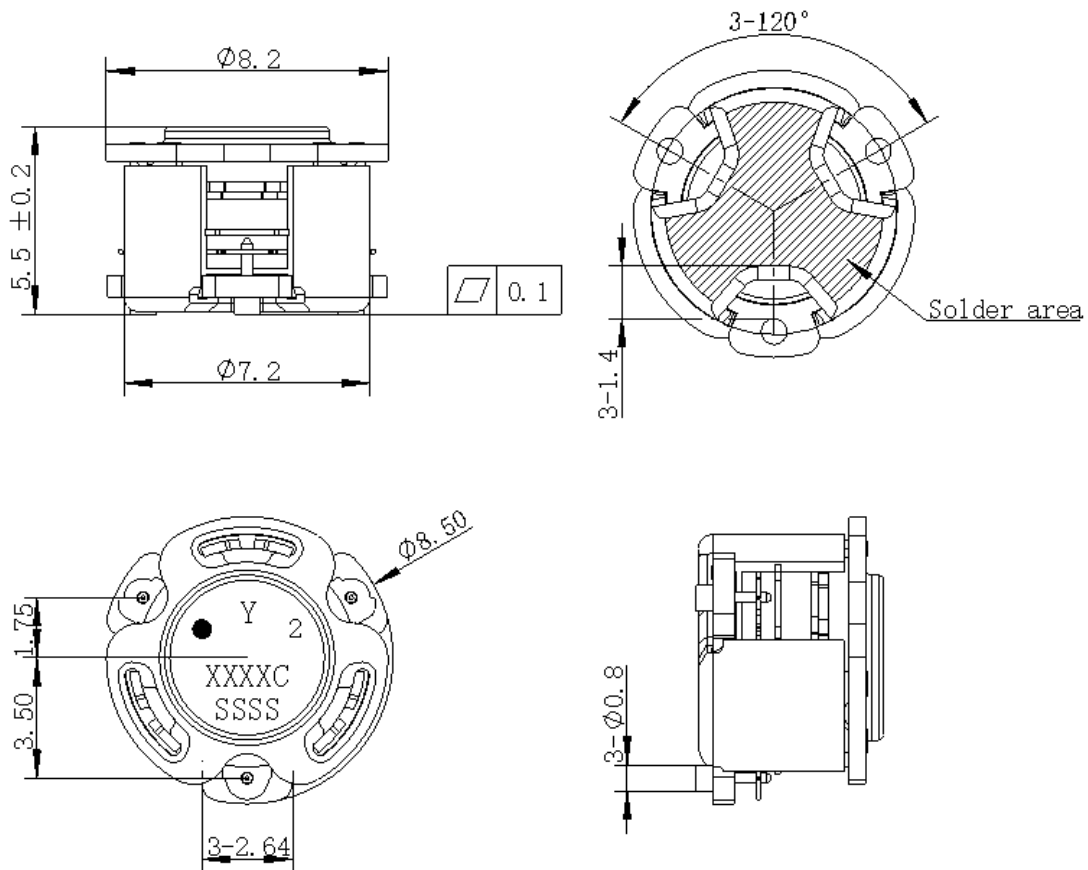
ITEM	SPECIFICATION	
Frequency	3550~3700	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.2@25°C $\pm$ 10°C 0.3@-40°C to +110°C	dB
Isolation (Min.)	22@25°C $\pm$ 10°C 20@-40°C to +110°C	dB
Return Loss (Min.)	22@25°C $\pm$ 10°C 20@-40°C to +110°C	dB
3rd IMD (Max.)	-63@2x1W CW tones, 1MHz spacing	dBc
Group delay	2	ns
2nd harmonic attenuation	15	dB
3rd harmonic attenuation	/	dB
Nx harmonic attenuation	/	dB
Power FWD/REV/PEAK	15/15/60	W
Termination/Attenuator	/	W/dB
Reciprocity	/	dB
Reciprocity	/	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  $\pm 0.2$  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 "Y" shown 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	-	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

