

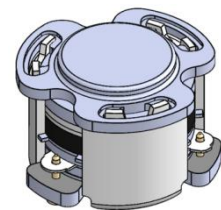


## DP0323C

### ENG PART: DP-7.2CM-3700T4000-CW

3700MHz to 4000MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2020/09/25	Nick
B	Operating temperature change from -40~+125 to -40~+110	ZC.Wu	2021/4/27	Nick
C	Update the label	ZZ.Zhu	2023/8/1	Nick
D	Update the outline drawing	ZC.Wu	2024/01/19	Nick

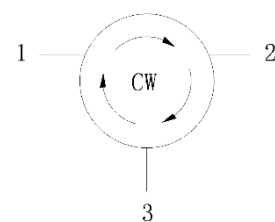


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 3700MHz to 4000MHz
- Operating temperature range: -40°C to +110°C
- Storage temperature range: -50°C to +130°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



### Electrical Specifications:

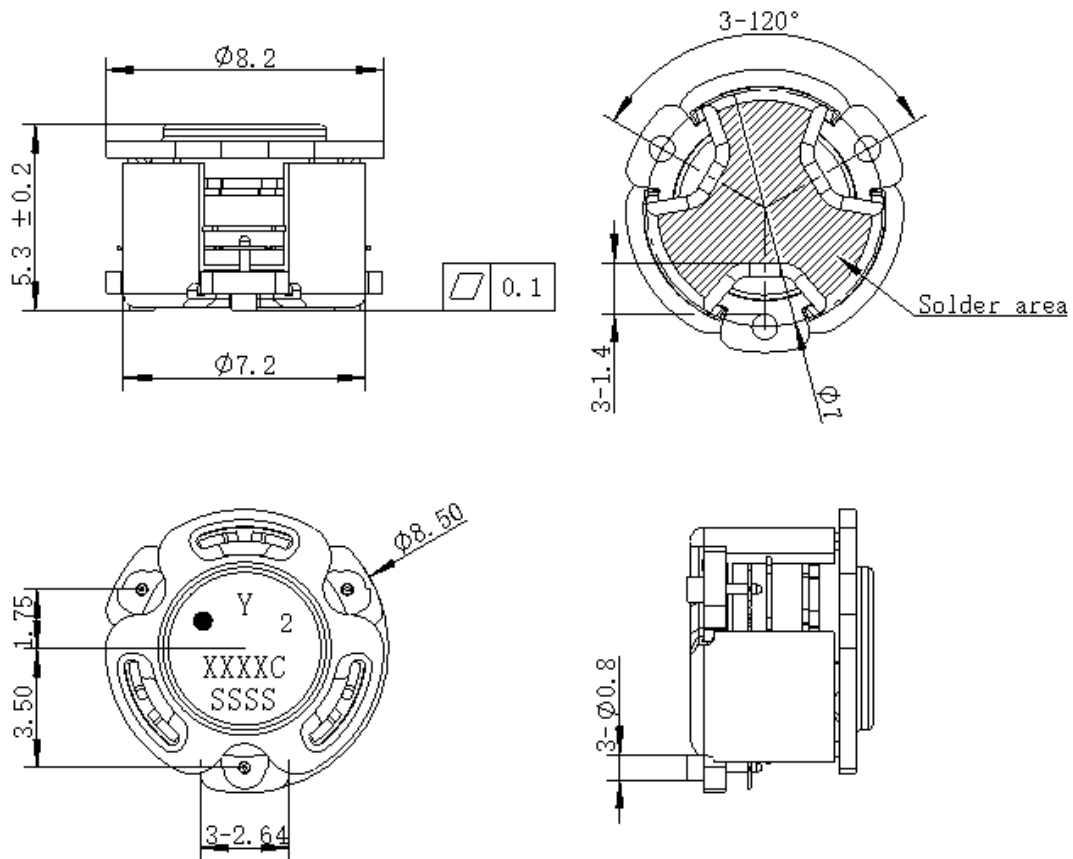
ITEM	SPECIFICATION	
Frequency	3700~4000	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.25@25°C $\pm$ 10°C 0.3@-40~+110°C	dB
Isolation (Min.)	20	dB
Return Loss (Min.)	20	dB
3rd IMD (Max.)	-55@2x15W CW tones, 5MHz spacing	dBc
Group delay	2	ns
2nd harmonic attenuation	15	dB
3rd harmonic attenuation	5	dB
Nx harmonic attenuation	5	dB
2nd Harmonic suppression (Max.)	-60	dBc
3rd Harmonic suppression (Max.)	-60	dBc
Power FWD/REV/PEAK	30/-/100	W
Termination/Attenuator	/	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.
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: 0.1mm maximum.
4. PartNumber, 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 PartNumber.
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

