

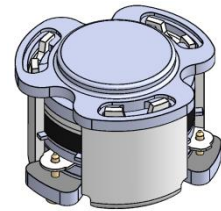


## DP3137C

### ENG PART:DP-7.0CM-3800T4200-CW

3800MHz to 4200MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	SAME AS REV.1	ZZ.Zhu	2024/3/23	Nick

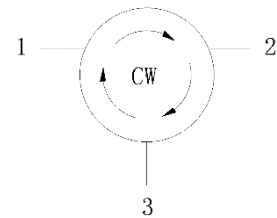


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 3800MHz to 4200MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -50°C to +135°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



### Electrical Specifications:

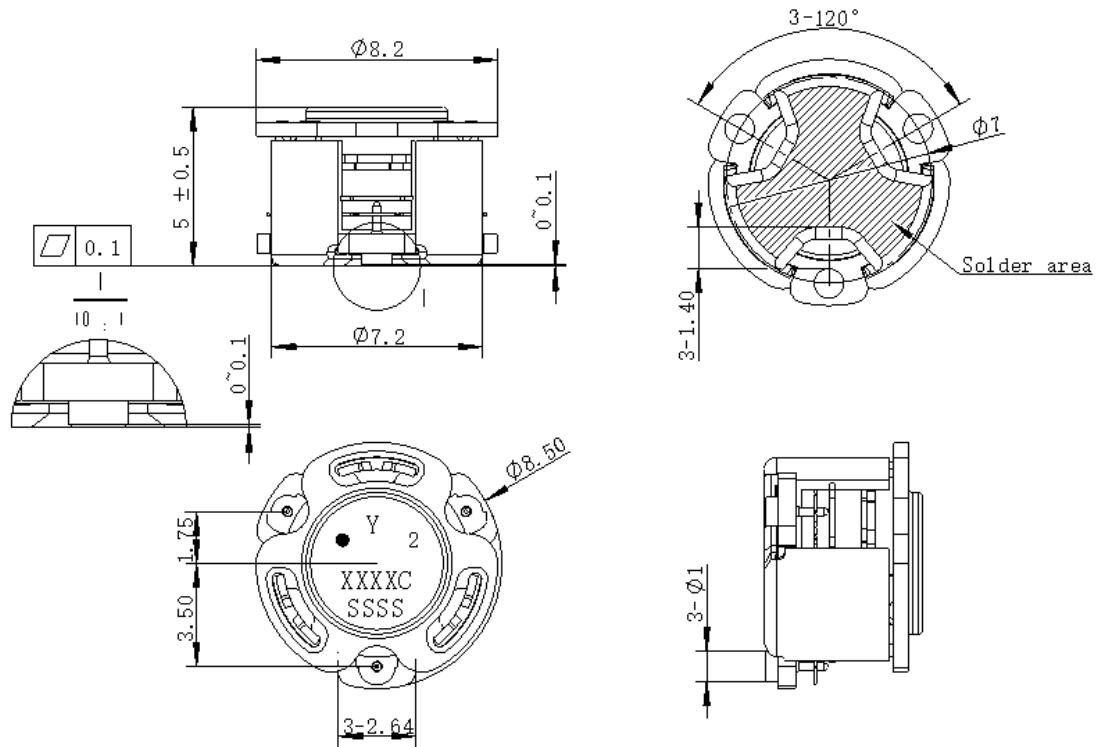
ITEM	SPECIFICATION	
Frequency	3800~4200	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.30@25±5℃ 0.33@-40~+105℃ 0.35@+105~+120℃	dB
Isolation (Min.)	23@25±5℃ 20@-40~+105℃ 18@+105~+120℃	dB
Return Loss (Min.)	23@25±5℃ 20@-40~+105℃ 18@+105~+120℃	dB
3rd IMD (Max.)	-60@2x5w Tones spacing 1MHz	dBc
2nd harmonic	10	dB
3rd harmonic	5	dB
Phase Consistency	/	°
Power FWD/REV/PEAK	20/-/150	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.



### 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	32	Φ7.4	9.2	2.7	6.0	Φ1.5	1.75	14.2	28.4	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

