

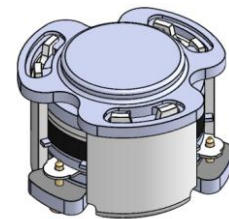


DP2067C

ENG PART:DP-7CM-3400T3800-CW

3400MHz to 3800MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZZ.Zhu	2022/10/25	Nick
B	Update the label	ZC.Wu	2022/12/7	Nick
C	Insertion loss @-40~+110°C change from 0.3dB to 0.33dB and Update the outline drawing	ZC.Wu	2023/1/16	Nick

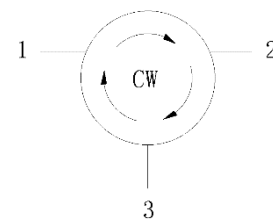


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 3400MHz to3800MHz
- Operating temperature range: -40°C to +110°C
- Storage temperature range: -65°C to +150°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



Electrical Specifications:

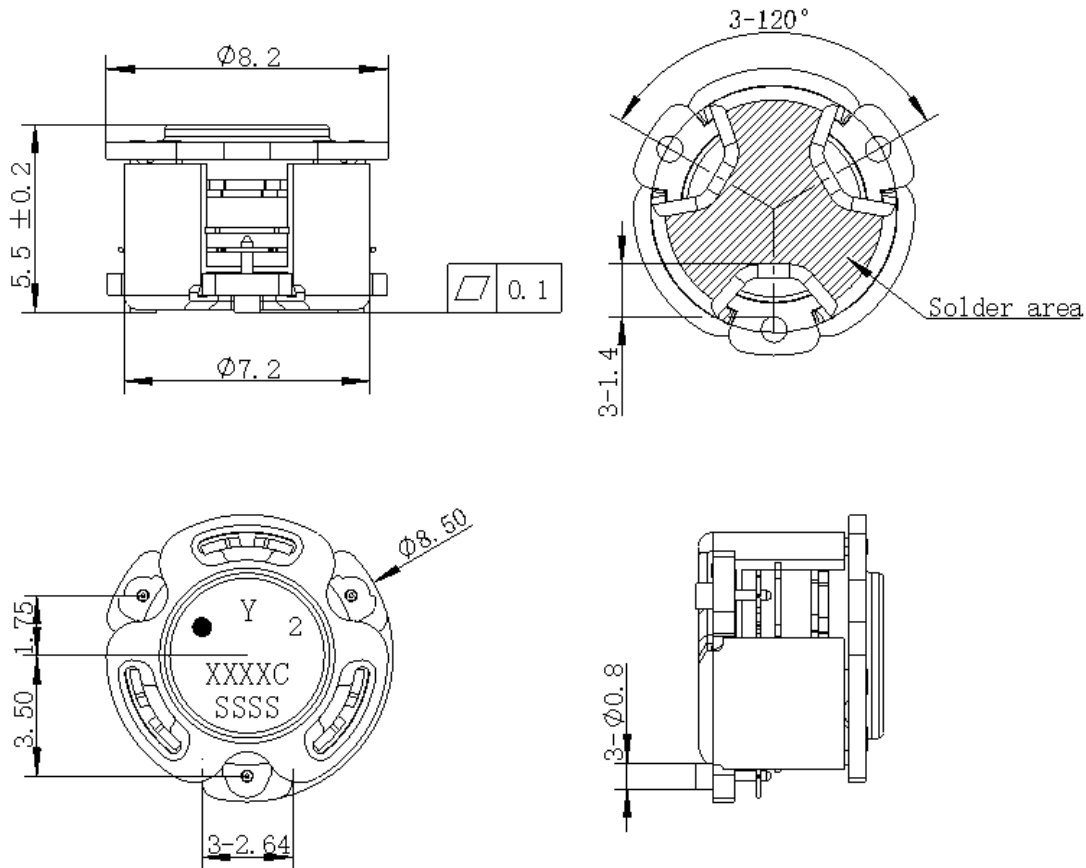
ITEM	SPECIFICATION	
Frequency	3400~3800	MHz
Direction	CW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.27@25°C \pm 10°C 0.33@-40~+110°C	dB
Isolation (Min.)	21	dB
Return Loss (Min.)	21	dB
3rd IMD (Max.)	-60	dBc
Group delay	2	ns
2nd harmonicsuppression	20@25°C 10@-40~+110°C	dBc
3rd harmonicsuppression	10@25°C 8@-40~+110°C	dBc
Extend Frequency	3200-4000	MHz
Isolation of extend frequency	10	dB
Power FWD/REV/PEAK	25/-/200	W
Resonance point of out off band	3200MHz-4000MHz	W/dB
Input Impedance ,real	47~55(Typ.51) @3400 MHz 42~50(Typ.46)@3600 MHz 47~55(Typ.51) @3800 MHz	Ω
Input Impedance ,imaginary	-7j ~1j (Typ.-3j)@3400 MHz -2j ~+6j (Typ.+2j)@3600 MHz -1j ~+7j (Typ.+3j)@3800 MHz	Ω

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.



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. 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 so on (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

