

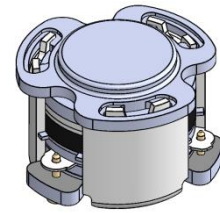


DP2305C

ENG PART:DP-7.0CM-1805T1880-CW

1805MHz to 1880MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZZ.Zhu	2022/12/1	Nick
B	Update the pin size	ZZ.Zhu	2023/11/7	Nick

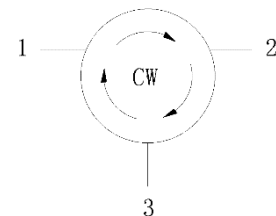


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 1805MHz to 1880MHz
- Operating temperature range: -40°C to +105°C
- Storage temperature range: -55°C to +150°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



Electrical Specifications:

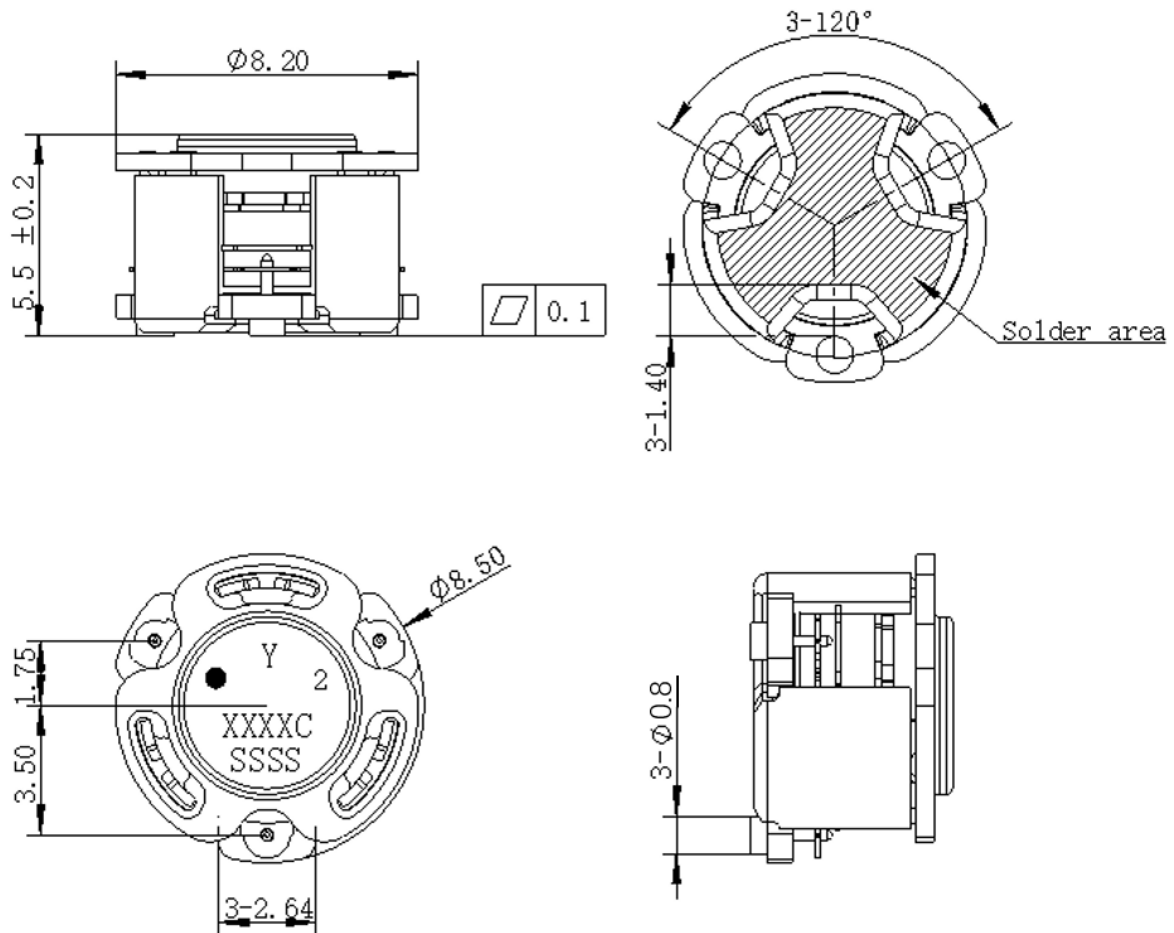
ITEM	SPECIFICATION	
Frequency	1805~1880	MHz
Direction	CW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.35@25±10℃ 0.40@-40~+105℃	dB
Isolation (Min.)	23@25±10℃ 21@-40~+105℃	dB
Return Loss (Min.)	23@25±10℃ 21@-40~+105℃	dB
3rd IMD (Max.)	-60@2x2.5W CW tones, 1MHz spacing@25±10℃	dBc
3rd IMD (Max.)	-50@2x2.5W CW tones, 1MHz spacing@- 40~+105℃	dBc
2nd harmonic	20	dB
3rd harmonic	10	dB
Power FWD/REV/PEAK	15/15/100	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.



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. 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 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	-	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

