

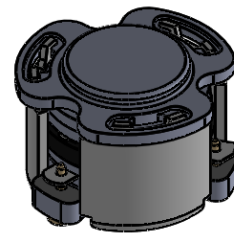


DP3579C

ENG PART:DP-7.0CM-1805T2170-CW

1805MHz to 2170MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	SAME AS REV.1	ZZ.Zhu	2024/11/19	Nick

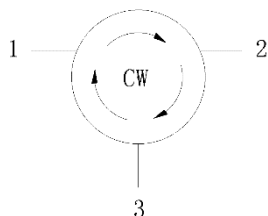


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 1805MHz to 2170MHz
- Operating temperature range: -40°C to +105°C
- Storage temperature range: -55°C to +135°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



Electrical Specifications:

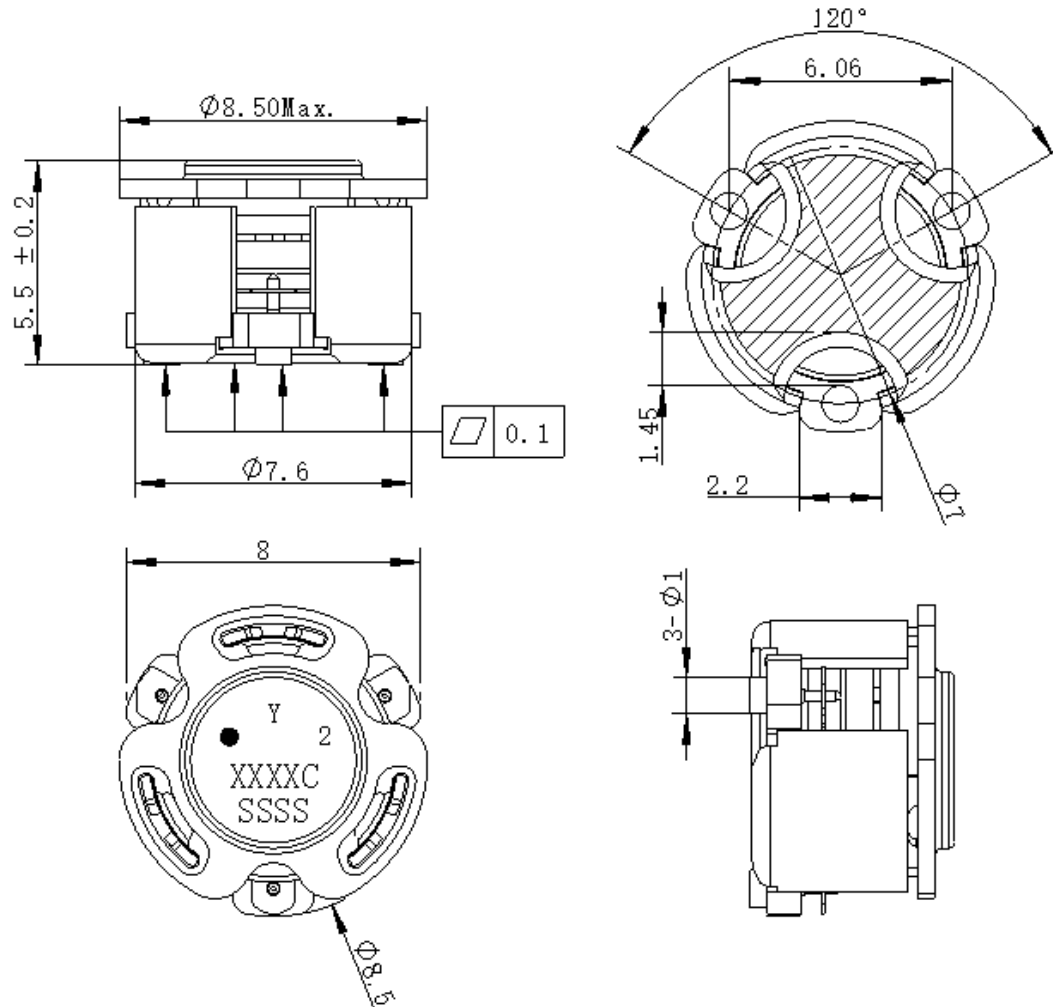
ITEM	SPECIFICATION	
Frequency	1805~2170	MHz
Direction	CW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.50@25 \pm 5 $^{\circ}$ C 0.55@-40~+105 $^{\circ}$ C	dB
Isolation (Min.)	16.5@1805-1880MHz&2110-2170MHz 14.0@1880-2110MHz	dB
Return Loss (Min.)	16.5@1805-1880MHz&2110-2170MHz 14.0@1880-2110MHz	dB
3rd IMD (Max.)	-55@2x2W CW tones, 5MHz spacing	dBc
2nd harmonic Attenuation	20	dB
3rd harmonic Attenuation	10	dB
Resonance point of out off band	1705MHz-2300MHz	W/dB
Power FWD/REV/PEAK	30/30/100	W

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 $^{\circ}$ 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: 0.1 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 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.