

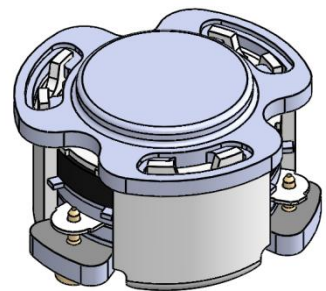


DP3145C

ENG PART:DP-7.0CM-2400T2500-CW

2400MHz to 2500MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
1	Creating datasheet	ZC.Wu	2024/3/23	Nick
2	The height dimensions changed from 4.8 ± 0.2 to 4.5 ± 0.2	ZC.Wu	2024/4/10	Nick

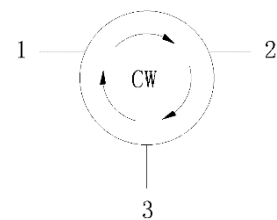


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 2400MHz to 2500MHz
- Operating temperature range: -40°C to $+85^{\circ}\text{C}$
- Storage temperature range: -50°C to $+130^{\circ}\text{C}$
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



Electrical Specifications:

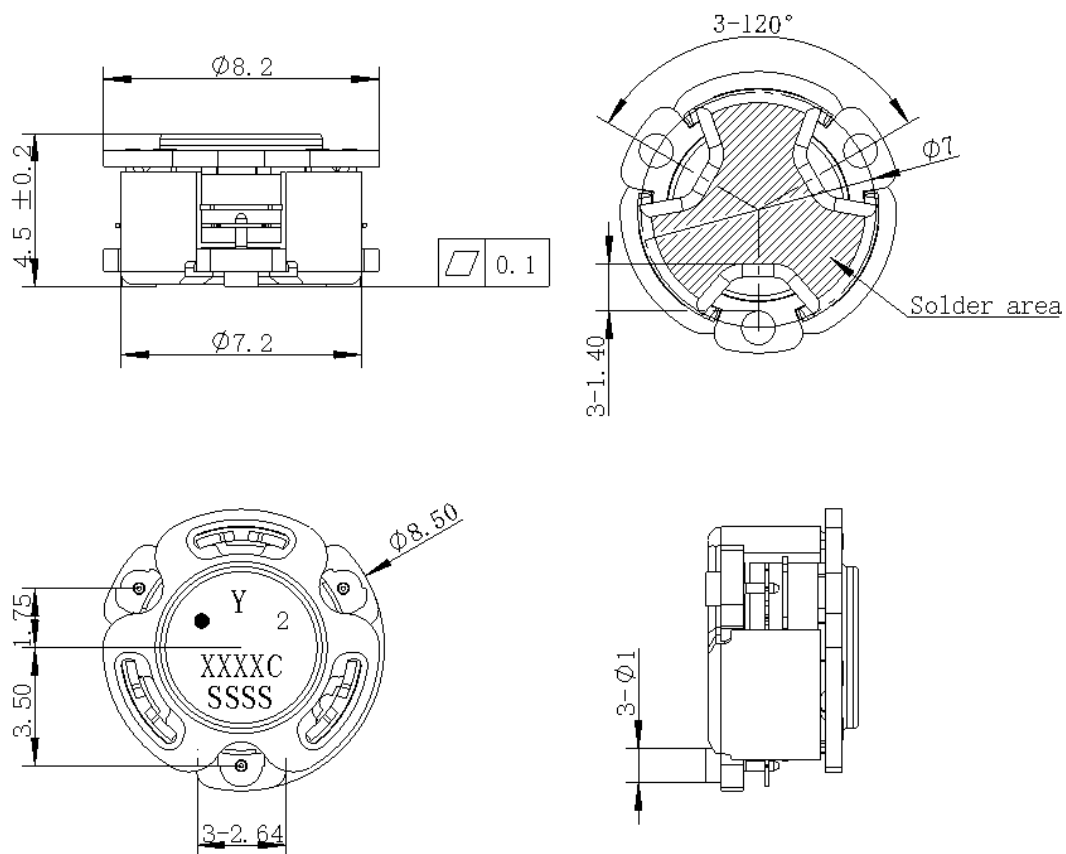
ITEM	SPECIFICATION	
Frequency	2400~2500	MHz
Direction	CW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.15	dB
Insertion Loss Ripple (Max.)	/	dB
Isolation (Min.)	20.0	dB
Return Loss (Min.)	20.0	dB
3rd IMD (Max.)	-60@2x5W CW tones, 1MHz spacing	dBc
Group delay	/	ns
2nd harmonic rejection (Min.)	/	dB
3rd harmonic rejection (Min.)	/	dB
Power FWD/REV/PEAK	20/20/150	W
Termination/Attenuator	/	W/dB
Input impedance (Real part)	42-58 (typ. 50)	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.



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 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