

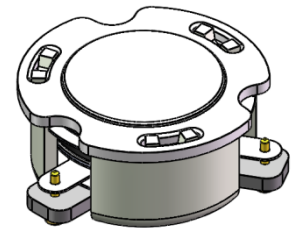


## DP3124C

### ENG PART:DP-15.5CM-2150T2170-CCW

2150MHz to 12170MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	SAME AS REV.1	ZZ.Zhu	2024/4/7	Nick

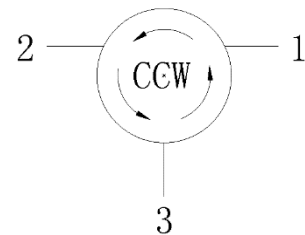


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 2150MHz to 2170MHz
- Operating temperature range: -40°C to +130°C
- Storage temperature range: -50°C to +150°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



**Electrical Specifications:**

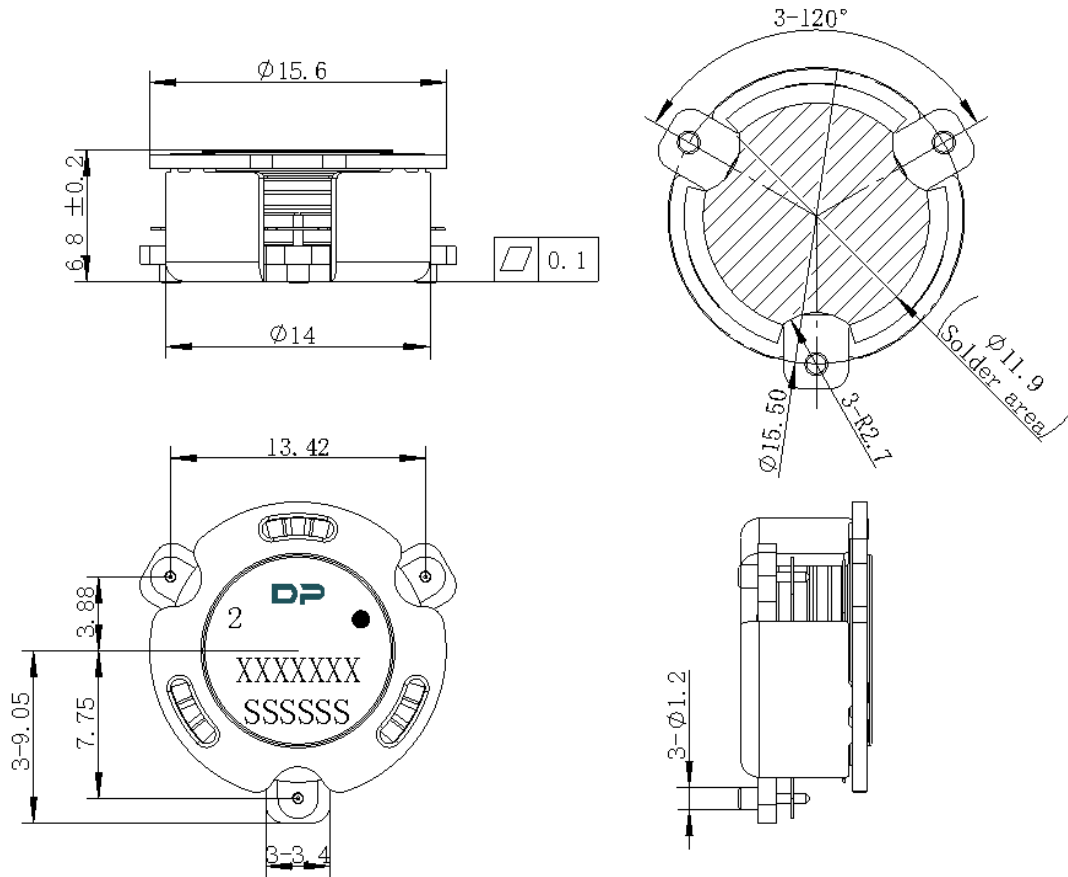
ITEM	SPECIFICATION	
Frequency	2150~2170	MHz
Direction	CCW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.20	dB
Isolation (Min.)	20	dB
Return Loss (Min.)	22	dB
3rd IMD (Max.)	-65@2x35W , 5MHz spacing	dBc
5th IMD (Max.)	-	dBc
Harmonics	0@ 2 x TX (60W CW ) -10@ 3 x TX (60W CW ) -10@ 4 x TX (60W CW )	dBm
Out of band attenuation	20@2xTX 10@3xTX	dB
Group delay	0.4~3.0	ns
Deviation from nominal delay over temperature range	-	ns
Power FWD/REV/PEAK	85/85/1000	W
Max voltage rating	-	V
Input Impedance (real)	-	$\Omega$
Input Impedance (Imaginary)	-	$\Omega$
Output Impedance	-	$\Omega$
Resonance out of	2140~2180	MHz
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: 0.1 mm maximum.
4. Part Number, Lot Code, and Port Designation are printed on the top side of device
5. The XXXXXXX on the label represents the part number
6. The SSSSSS on the label represents the serial number
7. The black dot on the label represents the input port



Packaging Style:

ITEM	Ψ	A0	B0	K0	D	E	F	F2	P	P0	P2	Γ
DM	44	Φ14.5	Φ17.2	7.3	Φ1.5	1.75	20.2	40.5	28	4	2	0.5
TOLE	±0.3	±0.2	±0.2	±0.2	+0.1	±0.1	±0.15	±0.1	±0.1	±0.1	±0.1	±0.05

