

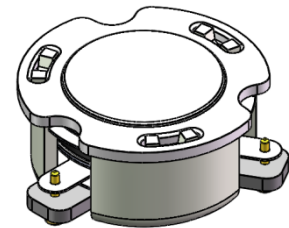


## DP3121C

### ENG PART:DP-15.5CM-1830T1860-CW

1830MHz to 1860MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	SAME AS REV.1	ZZ.Zhu	2024/3/20	Nick

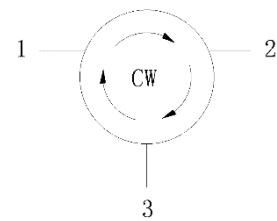


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 1830MHz to 1860MHz
- 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:

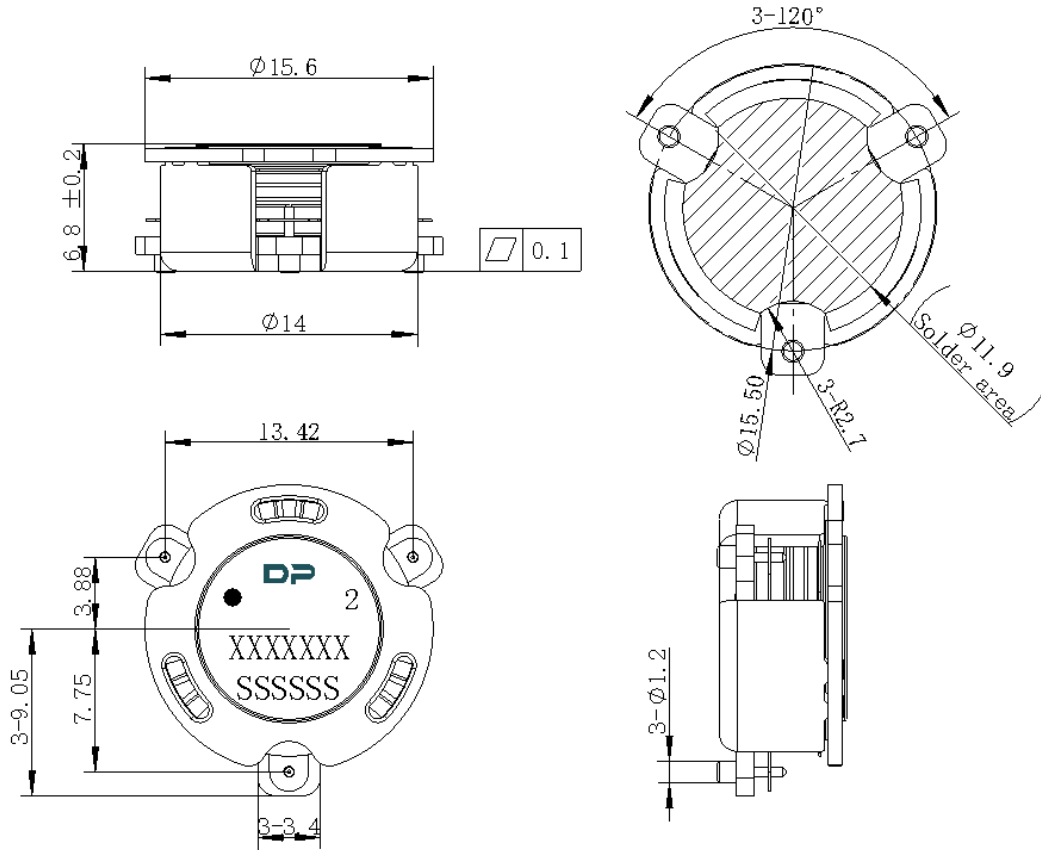
ITEM	SPECIFICATION	
Frequency	1830~1860	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.20	dB
Isolation (Min.)	20	dB
Return Loss (Min.)	22	dB
3rd IMD (Max.)	-65@2x35W , 5MHz spacing	dBc
5th IMD (Max.)	-	dBc
Harmonics	0@ 2 x TX (60W CW ) -10@ 3 x TX (60W CW ) -10@ 4 x TX (60W CW )	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	1840~1870	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: 0.1mm 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	W	A0	B0	K0	D	E	F	F2	P	P0	P2	T
DM	44	Φ14.5	Φ17.2	7.3	Φ1.5	1.75	20.2	40.5	28	4	2	0.5
TOL	±0.3	±0.2	±0.2	±0.2	+0.1	±0.1	±0.15	±0.1	±0.1	±0.1	±0.1	±0.05

